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TRANSCRIPT OF RECORD

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1946

No. 77

UNITED STATES OF AMERICA, PETITIONER

vs.

WILLIAM M. DICKINSON

No. 78

UNITED STATES OF AMERICA, PETITIONER

vs.

F. H. WITHROW

ON WRITS OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT

PETITION FOR CERTIORARI FILED APRIL 8, 1946
CERTIORARI GRANTED MAY 13, 1946

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A In the United States Circuit Court of Appeals for the Fourth Circuit

Nos. 5419 and 5420, Consolidated

UNITED STATES OF AMERICA, APPELLANT

v.

WILLIAM M. DICKINSON, APPELLEE

and

UNITED STATES OF AMERICA, APPELLANT

v.

F. H. WITHROW, APPELLEE

Appeal From the District Court of the United States for the Southern District of West Virginia at Charleston

Appendix to brief of the United States, appellant

Filed Oct. 6, 1945

1 In United States District Court, Southern District of West Virginia

Civil Action, File No. 278

WILLIAM M. DICKINSON, PLAINTIFF

v.

UNITED STATES OF AMERICA, DEFENDANT

Complaint

(1) Jurisdiction is founded upon the Fifth Amendment to the Constitution of the United States, and the provisions of the Act of Congress, February 24, 1925, 43 Stat. 972; U. S. C. Title 28, Section 41, Paragraph 20. This action is to recover just compensation, not in excess of $10,000.00, for certain lands in Kanawha County, West Virginia, appropriated for public use, and damages to the residue of the tract, as hereinafter more fully appears.

(2) Since October 16, 1937, the plaintiff has been the owner in fee simple of a certain tract of land, together with certain improvements thereon and the appurtenances thereunto belonging, situate in Jefferson District of Kanawha County, West Virginia, between the northern right-of-way line of U. S. Route 60 and the low water mark of the Great Kanawha River, lying to the west of the mouth of Davis Creek, and more particularly bounded and described as follows:

Beginning at the original northeast corner of the Spring Hill Development Company tract at a point in the low water mark of Kanawha River; thence with the eastern line of said tract S. 23°17′ E. 321.5 ft., more or less, to an iron pin located in the intersection of said eastern line of said tract and the north line of the right of way of State Route No. 60; thence with the north line of the right of way of said State Highway No. 60, in part S. 36°20′ W. 222 ft., and continuing in a southwesterly direction with the curved north line of said right of way to the right 156.74 ft., in all 378.74 ft., more or less, to a point in the north line of said right of way; thence leaving said north line of said right of way and running N. 33°52′ W. 430 ft., more or less, to a point in the low water mark of Kanawha River; thence with said low water mark of Kanawha River and in a northeasterly direction up the river 411 ft., more or less, to the point of beginning, and containing 3.1 acres, more or less.

(3) During the year 1935, and pursuant to an Act of Congress, approved August 30, 1935, House Document No. 31, 73rd Congress, 1st Session (Public No. 409, 74th Congress, H. R. 6732) entitled "An Act Authorizing the Construction, Repair and Preservation of Certain Public Works on Rivers and Harbors and Other Purposes," the defendant, under the direction of the Secretary of War and the supervision of the Chief of Engineers, commenced the construction and erection in said Great Kanawha River at [redacted] near the Town of Winfield, in Putnam County, West Virginia, a lock and dam commonly known as "Winfield Dam," for the purpose of impounding the waters in said river above said dam in order to raise the pool stage of the river between said dam and a certain other dam in said river near Marmet, in Kanawha County, West Virginia.

(4) On or about October 23, 1937, said Winfield Dam was completed and put into permanent operation, with the result that the pool stage in the Great Kanawha River at the location of plaintiff's said tract of land abutting thereon was permanently raised from a previous elevation of 554.65 feet, above mean sea level, Sandy Hook datum (pool stage of old Lock and Dam No. 7, then removed) to elevation 566 feet above mean sea level, Sandy Hook datum. During the progress of the construction of said dam and prior to its completion, certain partial raises in the pool above said dam were made, namely: On October 21, 1936, to elevation 547 feet above mean sea level; on May 30, 1937, to elevation 556 feet above mean sea level; and on October 20, 1937, to elevation 558 feet above mean sea level, all Sandy Hook datum.

(5) As a direct and proximate result of the construction and operation of said Winfield Dam, 0.22 acres of plaintiff's said tract of land has been permanently and continuously flooded and sub-

merged; that part of plaintiff's said tract of land lying between elevation 566 feet and elevation 574 feet above mean sea level, Sandy Hook datum, aggregating 0.10 acres, has been and will continue to be subject to more frequent overflow than previous to the construction of said dam; the remainder of said tract of land, together with the improvements thereon, has been greatly damaged and diminished in value; and plaintiff has been compelled to expend large sums of money in rebuilding two sewer lines situate thereon, in providing earth and rock fills, brick retaining walls, and stone riprapping across the northern portion of said tract of
3 land, in order to protect said residue from further damage and erosion due to saturation and softening of the soil and wave action thereon.

(6) No condemnation proceeding has been instituted by or on behalf of the defendant for the purpose of acquiring title to any part of said tract of land or for the purpose of acquiring any flowage or other easement thereon; and no payment of any kind has been made to the plaintiff by reason of the matters herein detailed.

Wherefore, plaintiff demands judgment against defendant for the sum of Ten Thousand Dollars ($10,000.00) and costs.

(S) CAMPBELL, MCCLINTIC & JAMES,
ERNEST K. JAMES,
Attorneys for Plaintiff.

Address: Charleston National Bank Bldg., Charleston, West Virginia.

(Filed April 1, 1943.)

In the United States District Court

Civil No. 278

Answer

FIRST DEFENSE

The complaint fails to state a cause of action upon which relief can be granted.

SECOND DEFENSE

I

Answering paragraph 1 of the complaint, defendant admits that under the Acts of Congress collected in 28 U. S. C. 41 (20), the United States has consented to be sued to recover damages not exceeding $10,000.00 upon any contract express or implied.

II

Defendant admits that since to wit, October 16, 1937, the plaintiff has owned some interest in the land described in paragraph 2

of the complaint. The defendant is without sufficient information to form an opinion whether the plaintiff is the owner of a fee simple interest in said land and therefore demands strict proof of the allegations in said paragraph 2.

III

Defendant admits the allegations in paragraph 3 of the complaint except that it declares the purpose of constructing
4 the lock and dam commonly known as Winfield Dam to have been the improvement of navigation on the Kanawha River.

IV

The defendant declares that on or about August, 1937, the Winfield Dam was completed and put into permanent operation and admits that the pool stage above the dam was raised from a previous elevation of 554.35 as follows:

October 21, 1936, to elevation 547.0
May 30, 1937, to elevation 556.0
October 20, 1937, to elevation 558.0
January 6, 1938, to elevation 563.15
August 26, 1938, to elevation 565.0
September 1, 1938, to elevation 565.5
September 22, 1938, to elevation 566.0

V

Defendant admits that the pool stage has been raised as aforesaid and that the lands described in paragraph 2 of the complaint have been flooded to elevation 566 feet Sandy Hook Datum. Defendant admits that said flooding has covered 0.22 acres of the land described in paragraph 2 of the complaint. Defendant denies each and every other allegation in paragraph 5 of the complaint.

VI

Defendant admits the allegations in paragraph 6 of the complaint.

THIRD DEFENSE

Defendant further avers that the purpose of constructing said Winfield Dam and the consequent creation of a normal pool stage of 9 feet was the improvement of navigation on the Kanawha River and that such improvement of navigation has resulted in special and direct benefits to the plaintiff's property and has largely enhanced its value by making it more suitable for the construction of a loading dock and other facilities for the receiving and shipping of material and other products.

FOURTH DEFENSE

Defendant alleges that the waters of the Kanawha River were not raised above the ordinary high-water mark by the construction of the Winfield Dam and that the lands, if any, of said plaintiff are subject to a servitude in favor of the defendant up to the point of said ordinary high-water mark.

Wherefore, defendant prays that the complaint be dismissed and that it be awarded its costs.

(S) Charles M. Love, Jr.,
CHARLES M. LOVE, JR.,
Assistant United States Attorney,
Charleston, West Virginia.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney,
Department of Justice,
Charleston, West Virginia.

(Filed July 1, 1943.)

In United States District Court

Civil No. 278

Pre-trial order

By agreement of the parties, the Court reserves its decision on all matters of law, without prejudice to the rights of any party, until the introduction of evidence by both plaintiff and defendant shall have been concluded.

The plaintiff and defendant agree as follows:

I

The full name and residence of the plaintiff are as follows: William M. Dickinson, South Charleston, Kanawha County, West Virginia.

II

Plaintiff claims the right to maintain this action under the provisions of the Fifth Amendment to the Constitution of the United States, providing that private property shall not be taken for public use without just compensation; and also upon the ground that the defendant is liable upon an implied contract to pay such just compensation. The nature of the plaintiff's claim for just compensation is the alleged taking of certain lands and the improvements thereon, and damages to the residue of the tract and the improvements thereon by reason of such taking and the use

thereof for the purpose for which taken. Said lands and improvements are all in Kanawha County, West Virginia and claimed to be owned by the plaintiff in fee simple, free from liens and encumbrances at the time of the alleged taking and damage, and the lands to which said claim relates are those described in the complaint.

6

III

Jurisdiction is founded on Paragraph 20, Section 41, Chapter 2, Title 28 of the United States Code.

IV

During the year 1935, pursuant to an Act of Congress, approved August 30, 1935, House Document No. 31, 73d Congress, 1st session (Public No. 409, 74th Congress, H. R. 6732) entitled "An Act authorizing the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes" the defendant, acting through the Secretary of War and the Chief of Engineers, constructed and erected in the Great Kanawha River, at or near the Town of Winfield in Putnam County, West Virginia, a lock and dam commonly known as "Winfield Dam," for the purpose of improving navigation by impounding the waters in said river above said dam in order to raise the pool stage of the river between said dam and a certain other dam in said river near Marmet, in Kanawha County, West Virginia.

V

Prior to May 30, 1937, normal pool stage of the Great Kanawha River at old Lock and Dam No. 7 was at elevation 554.65 feet above mean sea level, Sandy Hook datum, and this was the normal pool stage of said river at the plaintiff's property prior to the erection of the said Winfield Dam; that on May 30, 1937, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 556.0 feet above mean sea level; that on August 16, 1937 the plaintiff acquired such title as he now owns in the lands and improvements involved in this proceeding; that on October 20, 1937, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 558.0 feet above mean sea level; that on January 6, 1938, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 563.15 feet above mean sea level; that on August 26, 1938, by reason of the construction and operation of the said Winfield Dam, the pool stage of said river at the plaintiff's property, was raised to elevation 565.0 feet above mean sea level;

that on September 1, 1938, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 565.5 feet above
7 mean sea level; and that on September 22, 1938, by reason of the construction and operation of said Winfield Dam, the present pool stage, above the Winfield Dam, in the Winfield Pool and at the plaintiff's property, was attained, and such normal pool stage, since September 22, 1938, is elevation 566.0 feet above mean sea level, Sandy Hook datum. The present normal pool stage in said river, at the plaintiff's property, is 11.35 feet above the normal pool stage of old Lock and Dam No. 7 and 0.22 acre of the lands described in the complaint is permanently submerged thereby; and that the area of the land described in the complaint that is between elevation 566 and 574 is 0.10 acre.

VI

Old Lock and Dam No. 7 was constructed on or about the ------day of----------, 1893, and said Lock and Dam was designed and operated to raise the stage of the Kanawha River approximately 5 feet at plaintiff's property.

VII

No condemnation proceeding has been instituted by or on behalf of the defendant for the purposes of acquiring title to any part of such land or for the purpose of acquiring any flowage or other easement thereon; and no payment of any money had been made to the plaintiff.

VIII

The parties stipulate and agree that the defendant will obtain, through its Engineering Corps, and submit in tabulation form, official data and information with reference to maximum water elevation and frequency of same in the Kanawha River, at the plaintiff's property, such data to include, at least, data comparable to that supplied and attached to the pre-trial order of this Court in the case of John A. Willis et al., Plaintiffs v. United States of America, Defendant, Civil Action File No. 85; that such data may be treated as in evidence, subject to such objection as counsel for either plaintiff or defendant may make, and with the further right to each party to examine or cross-examine the engineer or other official responsible for its preparation, either with regard to said tables or records or his calculations.

IX

The plaintiff contends that he is entitled to:

(1) Just compensation for all of his lands and the improve-

ments thereon lying between ordinary high water mark in the Kanawha River, in its natural state, and elevation 566
8 feet above mean sea level which have been permanently submerged by the construction and operation of the Winsfield Dam;

(2) Just compensation for the right and easement to subject his lands lying between elevation 566 feet and 574 feet above mean sea level to more frequent overflow than previous to the construction of the Winfield Dam;

(3) Damages to the residue of his tract of land and the improvements thereon caused by and which are the proximate result of the taking of the part appropriated or the use thereof for the purposes taken, and which damages include:

(a) Damages by reason of the severance of the part taken;

(b) Erosion due to saturation and softening of the soil and wave action thereon;

(c) The reasonable cost of protective measures necessary to prevent further such erosion; and

(d) The reasonable cost of rebuilding two sewer lines on said residue.

The plaintiff further contends that the amount of his claim is not to be treated as reduced or diminished by reason of the fact that the stage in the Kanawha River at Plaintiff's property was raised to elevation 556.0 feet, above mean sea level, prior to the date on which plaintiff acquired title to said land and improvements. Plaintiff contends that the taking of his property by the defendant was not complete until the present pool stage at elevation of 566 feet was attained on September 22, 1938; that only one cause of action accrued by reason of the taking; that he was the owner of the property at the time the cause of action accrued; and that such cause of action may not be regarded as split up.

X

The defendant denies all liability on all of plaintiff's claims except that for the land lying above elevation 556.0 feet above mean sea level which is permanently flooded or intermittently flooded at such frequency and for such duration as to be considered taken by reason of the construction, operation and maintenance of the Winfield Dam and defendant denies liability for the full value of the fee title or a flowage easement over that land.

The grounds of the defense are:

1. That plaintiff can have no cause of action for a taking or damage by defendant prior to the acquisition of the land by plaintiff.

2. That by the construction and operation of Lock and Dam No. 7 and the maintenance of the pool behind it at elevation 554.65 for more than ------ years the United States acquired the right by eminent domain or by adverse possession or prescription to maintain the pool at that level without liability.

3. That to the extent that lands lying above elevation 554.65 were intermittently flooded prior to the construction of the Winfield Dam by reason of the operation and maintenance of Lock and Dam No. 7 the United States had acquired by eminent domain, adverse possession or prescription the right to flood intermittently and the value of plaintiff's interest in those lands, if any, was reduced accordingly.

4. That all of plaintiff's claims (except for land permanently flooded or intermittently flooded at such frequency and for such duration as to be considered taken above elevation 556.0 feet above mean sea level) are for consequential damages or sound in tort.

5. That all damage for which plaintiff claims (other than for lands permanently flooded or intermittently flooded at such frequency and for such duration as to be considered taken) could have been prevented by appropriate protective measures which were and are both practically and economically feasible.

6. That the defendant is not liable for the cost of protective measures either actually erected by plaintiff or not erected but made necessary by the construction and operation of the Winfield Dam and the maintenance of the pool behind it.

Enter: April 18, 1944.

BEN MOORE, *District Judge.*

Approved:

Leslie E. Given,
LESLIE E. GIVEN,
United States Attorney.
John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice.
Ralph S. Boyd,
RALPH S. BOYD,
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Attorney, Department of Justice
Attorneys for Defendants.
CAMPBELL, MCCLINTIC & JAMES,
ERNEST K. JAMES,
Attorneys for Plaintiffs.

10 *Kanawha River, W. Va., Winfield Pool, Parcel No. 1038A, Mile 53.2 William Dickinson v. United States of America. Civil Action File No. 278. Maximum yearly high water elevations. Calendar order—1887 to 1936 incl.*

[Data referred to in Pre-trial Order, par. VIII—Civil No. 278]

Year	Date	Highest stage in feet	Time	Elevation at Lock No. 6	Elevation at parcel 1012
1887	4 Feb	28.85	8:00 a. m	576.75	576.05
1888	28 Oct	24.20	5:00 a. m	572.10	571.40
1889	1 June	35.70	4:00 p. m.*	583.60	582.90
1890	23 Mar	36.70	9:00 a. m	584.60	583.90
1891	3 Jan	32.20	2:00 a. m	580.10	579.40
1892	15 Jan	34.60	3:00 p. m	582.50	581.80
1893	18 Feb	35.65	12:00 Noon	583.55	582.85
1894	5 Feb	25.20	8:00 a. m	573.10	572.40
1895	9 Apr	32.95	8:00 a. m	580.85	580.15
1896	31 Mar	33.60	6:30 p.m	581.50	580.80
1897	23 Feb	48.80	Midnight	596.70	596.00
1898	11 Aug	38.00	8:00 a.m	585.90	585.20
1899	5 Mar	48.90	10:00 p.m.*	596.80	596.10
1900	27 Nov	38.60	8:00 a.m	586.40	585.70
1901	23 May	45.70	3:00 p.m	593.60	592.90
1902	1 Mar	44.70	6:00 p.m*	592.60	591.90
1903	24 Mar	30.50	8:00 a.m	584.40	583.70
1904	28 Apr	21.40	8:00 a.m	569.30	568.60
1905	13 May	35.20	8:00 a.m	583.10	582.40
1906	25 Jan	34.70	8:00 a.m	582.60	581.90
1907	14 June	41.90	10:00 p.m.*	588.90	588.20
1908	2 Apr	39.00	2:00 a.m.*	586.90	586.20
1909	2 May	23.20	8:00 a.m	571.10	570.40
1910	18 June	30.05	Midnight	577.95	577.25
1911	31 Jan	34.00	1:00 a.m.*	581.90	581.20
1912	17 Mar	33.50	2:00 a.m	581.40	580.70
1913	28 Mar	42.90	6:00 p.m	590.80	590.10
1914	20 Feb	26.70	4:00 p.m	574.60	573.90
1915	3 Feb	38.00	4:00 p.m	585.90	585.20
1916	17 July	38.80	5:30 p.m	586.70	586.00
1917	5 Mar	37.00	8:00 a.m	584.90	584.20
1918	14 Mar	44.60	3:30 a.m	592.50	591.80
1919	2 Jan	43.60	9:15 p.m	591.50	590.80
1920	23 Jan	34.75	2:00 p.m	582.65	581.95
1921	25 Dec	33.20	4:00 a.m	581.10	580.40
1922	22 Feb	26.70	7:00 a.m	574.60	573.90
1923	4 Feb	31.00	10:00 a.m	578.90	578.20
1924	13 May	37.55	12:00 Noon	585.45	584.75
1925	16 Feb	21.20	8:00 a.m	569.10	568.40
1926	23 Dec	33.75	1:00 a.m	583.65	582.95
1927	24 Feb	30.40	5:00 a.m	578.30	577.60
1928	1 May	30.00	8:00 a.m	577.90	577.20
1929	3 Oct	37.25	Midnight	585.15	584.45
1930	6 Feb	21.40	8:00 a.m	569.30	568.60
1931	6 Apr	23.20	8:00 a.m	571.10	570.40
1932	5 Feb	36.75	8:00 p.m	584.65	583.95
1933	21 Mar	31.50	8:00 a.m	579.40	578.70
1934	6 Mar	37.90	3:00 p.m	585.80	585.10
1935	24 Jan	35.40	8:00 a.m	583.30	582.60
1936	18 Mar	38.90	1:30 p.m	586.80	586.10

Average yearly high-water elevation=581.75.

The maximum flood of record at Parcel No. 1038A occurred September 1861 and reached elevation 601.2.

NOTE: *Estimated from Charleston gage records.

11 *Kanawha River, W. Va., Winfield Pool, Parcel No. 1038A, Mile 53.3. William Dickinson v. United States of America. Civil Action File No. 278. Maximum yearly high water elevations*

FREQUENCY TABLE

[Data referred to in Pre-trial Order, par. VIII—Civil No. 278]

Hydrographs of all open river rises that occurred during the 50 year period of record, 1887–1936 inclusive, were plotted and a tabulation made showing the number of times that the open river rises equalled or exceeded various elevations, as follows:

Stage in feet at Old Lock No. 6 Lower Pool	Elevation of W. S. at Old Lock No. 6 Lower Pool	Number of rises in 50-year continuous period	Frequency of occurrence in years	Elevation of W. S. at Parcel No. 1038A
8	556.9	905	0.055	555.2
9	556.9	869	.058	555.2
10	557.9	760	.066	557.2
11	558.9	696	.072	558.2
12	559.9	652	.077	559.2
13	560.9	601	.083	560.2
14	561.9	548	.091	561.2
15	562.9	479	.104	562.2
16	563.9	424	.118	563.2
17	564.9	362	.138	564.2
18	565.9	323	.155	565.2
19	566.9	288	.174	566.2
20	567.9	262	.191	567.2
21	568.9	238	.210	568.2
22	569.9	209	.239	569.2
23	570.9	192	.260	570.2
24	571.9	160	.312	571.2
25	572.9	139	.360	572.2
26	573.9	127	.384	573.2
27	574.9	111	.450	574.2
28	575.9	97	.515	575.2
29	576.9	84	.595	576.2
30	577.9	76	.657	577.2
31	578.9	71	.705	578.2
32	579.9	63	.794	579.2
33	580.9	53	.944	580.2
34	581.9	43	1.161	581.2
35	582.9	35	1.43	582.2
36	583.9	27	1.85	583.2
37	584.9	22	2.27	584.2
38	585.9	18	2.78	585.2
39	586.9	13	3.85	586.2
40	587.9	11	4.55	587.2
41	588.9	9	5.55	588.2
42	589.9	8	6.25	589.2
43	590.9	7	7.14	590.2
44	591.9	5	10.0	591.2
45	592.9	3	16.67	592.2
46	593.9	2	25.0	593.2
47	594.9	2	25.0	594.2
48	595.9	2	25.0	595.2
49	596.9			596.2

A frequency curve was plotted from this tabulation showing, that during the 50-year period of continuous record, an open river rise having an average frequency of occurrence once each year, would rise to or exceed a stage of 33.1 feet or elevation 581.0 at Old Lock No. 6, and to elevation 580.3 feet or greater at Parcel No. 1038A, based on the average fall of the river from Old Lock No. 6 to Parcel No. 1038A, which is 0.7 foot.

12 In United States District Court

Civil No. 278

Motion to strike evidence

Comes now the defendant, the United States of America, and moves the court to strike from the record in the above entitled action:

I

All of plaintiff's evidence of the value of land below elevation 566 for which Dickinson claims, because all such evidence is of the value of the land on September 22, 1938, a date unrelated to any taking.

II

All evidence of the value of land below elevation 566 in excess of .05 acre for which Dickinson claims, because the undisputed evidence shows that Dickinson still has all other land below that elevation.

III

All evidence as to land lying between elevations 566 and 574

(a) because there is no evidence of any taking between those elevations,

(b) because there is no evidence that any land between those elevations has been or will be affected at all by the construction and operation of Winfield Dam,

(c) because none of such evidence purports to show, to be based upon or to have taken into consideration either the frequency or duration of the intermittent flooding with which it dealt or the amount of damage to the land resulting from such flooding,

(d) because the area which Dickinson claims may be affected is not shown by the evidence and all valuations were based on area.

IV

All evidence of the cost of riprapping, filling or other protective measures,

(a) because the United States is not liable for such costs and damages,

(b) because in any event no sufficient foundation for the claim was laid since there is no evidence of the extent of the damage to be prevented by such measures.

V

The testimony given by Dickinson on direct examination commencing with his first answer on page 42 and continuing through

his answer on page 45, because the identity of the persons
13 making the representations was not established as promised by counsel, as shown on page 43 of the transcript of the evidence.

VI

Dickinson's exhibits 13 to 21, inclusive,

(a) because they are letters in which the parties attempted to compromise and settle their differences,

(b) because there is no showing that the authors of the letters to Dickinson were authorized to bind the United States as to anything said in the letters,

(c) because the copies of Dickinson's letters are mere self-serving hearsay,

(d) because all are irrelevant and immaterial in that they do not tend to prove any fact at issue.

VII

All evidence as to values given by plaintiff's witness, George F. Skidmore,

(a) because his own testimony shows that he used a wholly artificial and inadmissible method of reaching his valuations,

(b) because his own testimony shows that his testimony dealt with a hypothetical lot in a hypothetical place, different in shape, location, elevation, contour and usefulness from the land in question.

(S) Leslie E. Given,
LESLIE E. GIVEN,
United States Attorney.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice.

(S) Ralph S. Boyd,
RALPH S. BOYD,
Attorney, Department of Justice.

(Filed February 22, 1945.)

In United States District Court

Civil No. 278

Motion for judgment or for dismissal of complaint

Comes now the defendant, the United States of America, and moves the court to enter judgment in its favor and against the

plaintiff or, in the alternative, to dismiss the complaint for want of jurisdiction for the reasons that:

14 1. The pleadings, stipulations and evidence show that the action was not commenced within six years of the date when the cause accrued.

2. The pleadings, stipulations and evidence show that the claim asserted by plaintiff accrued to his predecessor in title and neither has been nor can be assigned to plaintiff.

(S) Leslie E. Given,
LESLIE E. GIVEN,
United States Attorney.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice.

(S) Ralph S. Boyd,
RALPH S. BOYD,
Attorney, Department of Justice.

(Filed February 22, 1945.)

In United States District Court

Civil No. 278

Judgment

This day came the plaintiff, William M. Dickinson, by Campbell, McClintic & James, his attorneys, and the defendant, United States of America, by Leslie E. Given, United States Attorney, and John R. Dyer, Special Attorney, Department of Justice, and thereupon the plaintiff, by counsel, tendered his motion in writing to exclude certain evidence of the defendant in said written motion set forth and upon the grounds therein assigned, which motion is hereby filed, and the Court having considered the matters of law arising upon said motion and the argument of counsel thereon, doth overrule said motion, and to the action of the Court in overruling said motion, the plaintiff, by counsel, objects and excepts.

Thereupon the defendant, by counsel, tendered its motion in writing to strike certain evidence of the plaintiff in said written motion set forth and upon the grounds therein assigned which motion is hereby filed, and the Court having considered the matters of law arising upon said motion and the argument of counsel thereon, doth overrule said motion, except as to paragraphs V and VI thereof, and doth sustain said motion as to the evidence re-

ferred to in said paragraphs V and VI, and to the action
15 of the Court in overruling said motion, except as to paragraphs V and VI thereof, the defendant, by counsel, objects and excepts, and to the action of the Court in sustaining said motion as to the evidence referred to in said paragraphs V and VI the plaintiff, by counsel, objects and excepts.

Thereupon the defendant, by counsel, tenders its motion in writing for a judgment or for dismissal of the complaint upon grounds in said written motion assigned, which motion is hereby filed, and the Court having considered the matters of law arising upon said motion and the argument of counsel thereon, doth overrule said motion, and to the action of the Court in overruling said motion the defendant, by counsel, objects and excepts.

And the Court having maturely considered the briefs and oral argument of counsel for the respective parties, and being of opinion that the plaintiff is entitled to recover from the defendant the sum of $4,720.63, with interest thereon at the rate of 6% per annum from September 22, 1938, to the date of the rendition of this judgment aggregating the sum of $6,538.06, with interest on such aggregate or judgment at the rate of 4% per annum until the time when an appropriation is made for the payment of said judgment, the Court having rendered in writing its findings of fact and conclusions of law herein and having written a letter dated December 14th, 1944, wherein its reasons for its findings and its conclusions were stated, and having adopted said letter, findings and conclusions as its opinion herein, the same are hereby ordered filed as part of the record of this action; and it is further considered by the Court and so ordered that the plaintiff, William M. Dickinson, do recover of and from the defendant, the United States of America, the sum of $6,538.06, with interest thereon at the rate of 4% per annum from this the 22d day of February, 1945, until the time when an appropriation is made for the payment of said judgment, and his costs in this behalf actually incurred for witnesses and for summonsing the same and for fees paid to the Clerk of this Court, such costs amounting in the aggregate to the sum of $10.00.

And it is further considered by the court, and so ordered, that upon the payment of the sums of money aforesaid, the defendant, United States of America, shall be entitled to and it shall thereupon be vested with the perpetual and full right and easement to use in aid of navigation on the Great Kanawha River, by means of the construction and operation of the present dam at Winfield,
or otherwise, so much of the land of William M. Dickinson
16 described in the complaint filed herein as lies between elevations 554.65 feet and 566.0 feet, above mean sea level,

Sandy Hook Datum, as the same existed on the date of the taking, namely, on September 22, 1938, and containing 0.22 acres, more or less; and that as to the said land of William M. Dickinson described in said complaint lying between elevations 566.0 feet and 574.0 feet, above mean sea level, Sandy Hook Datum. as the same existed on the date of the taking, namely, on September 22, 1938, and containing 0.10 acres, more or less, the United States of America shall thereupon be entitled to and shall be vested with a perpetual easement for such use (not constant flowage, however) as may result from the construction and operation of said Winfield Dam in aid of navigation on said Great Kanawha River.

To the action of the Court in rendering judgment for the plaintiff, the defendant, by counsel, objects and excepts, assigning as grounds therefor:

1. That the Court erred in overruling its motion to strike certain evidence of the plaintiff in said written motion set forth, except as to paragraphs V and VI thereof.

2. That the Court erred in overruling its motion for a judgment or for dismissal of the complaint.

3. That the Court erred in not describing the property over which the defendant acquires the aforesaid easement as the property is shown and delineated upon a map thereof filed as part of the evidence herein, as plaintiff's Exhibit Two.

4. That such judgment is contrary to the law and evidence.

And for other reasons assigned at the bar of the Court.

And for the reasons aforesaid, the defendant moved the Court to set aside said judgment and award it a new trial, which motion the Court overruled and the defendant excepted.

Enter: February 22, 1945.

(S) BEN MOORE, *District Judge.*

17 In United States District Court Southern District of West Virginia

Civil Action, File No. 280

F. H. WITHROW, PLAINTIFF

v.

UNITED STATES OF AMERICA, DEFENDANT

Complaint

(1) Judisdiction is founded upon the Fifth Amendment to the Constitution of the United States and the provisions of

the Act of Congress, February 24, 1925, 43 Stat. 972; U. S. C., Title 28, Section 41, Paragraph 20. This action is to recover just compensation, not in excess of $10,000.00, for certain lands in Kanawha County, West Virginia, appropriated for public use, and damages to the residue of the tract, as hereinafter more fully appears.

(2) Since November 13, 1926, except as mentioned and described in paragraph (3) hereof, the plaintiff has been the owner in fee simple of a certain tract of land, together with certain improvements thereon and the appurtenances thereunto belonging, situate in Jefferson District of Kanawha County, West Virginia, fronting one hundred eighty (180) feet, more or less, on the south side of the Great Kanawha River near the Town of Spring Hill, west of the City of Charleston, and more particularly bounded and described as follows:

All of Lots 201, 202, 203, 204, 205, 206, and 207 of Block F of Parkland, as laid out into lots, streets and alleys upon the map of same made by Clark & Krebs, C. E., filed and recorded in the office of the Clerk of the County Court of Kanawha County, West Virginia, and also five (5) feet off of the upper or eastern side of Lot 10 of the Settle Subdivision of Spring Hill, which adjoins the lower or western boundary of said Lot 201 of the Parkland Addition; together with the river bank in front of said lots between River Drive and low water mark on said Great Kanawha River.

(3) By deed bearing date March 15, 1941, and duly of record in said County Clerk's office in Deed Book 569 at page 85, said plaintiff sold and conveyed to George F. White and Vera White, his wife, and to the survivor of either of them, all of said Lots 207, 206 and ten (10) feet off of the eastern or upper side of said Lot 205 of Block F of Parkland, as shown upon said map thereof filed in said Clerk's office as aforesaid, together with the river bank in front of said Lots 207, 206 and ten (10) feet off of the upper or eastern side of said Lot 205 of Block F, between River Drive and the low water mark on said Great Kanawha River.

(4) During the year 1935, and pursuant to an Act of Congress, approved August 30, 1935, House Document No. 31, 73rd Congress, 1st Session (Public No. 409, 74th Congress H. R. 6732) entitled "An Act Authorizing the Construction, Repair and Preservation of Certain Public Works on Rivers and Harbors and Other Purposes," the defendant, under the direction of the Secretary of War and the supervision of the Chief of Engineers, commenced the construction and erection in said Great Kanawha

River at on near the Town of Winfield, in Putnam County, West Virginia, of a lock and dam commonly known as "Winfield Dam," for the purpose of impounding the waters in said river above said dam in order to raise the pool stage of the river between said dam and a certain other dam in said river near Marmet, in Kanawha County, West Virginia.

(5) On or about October 23, 1937, said Winfield Dam was completed and put into permanent operation, with the result that the pool stage in the Great Kanawha River at the location of plaintiff's said tract of land abutting thereon was permanently raised from a previous elevation of 554.65 feet, above mean sea level, Sandy Hook datum (pool stage of old Lock and Dam No. 7, then removed) to elevation 566 feet above mean sea level, Sandy Hook datum.

(6) As a direct and proximate result of the construction and operation of said Winfield Dam, 0.11 acres of plaintiff's said tract of land has been permanently and continuously flooded and submerged; that part of plaintiff's said tract of land lying between elevation 566 feet and elevation 574 feet above mean sea level, Sandy Hook datum, aggregating 0.04 acres, has been and will continue to be subject to more frequent overflow than previous to the construction of said dam and, as a result thereof, has been greatly damaged; and the remainder of said tract of land, together with the improvements thereon, has been greatly damaged and diminished in value; and the plaintiff will be compelled to expend large sums of money in providing earth and rock fills, retaining walls and stone riprapping across the northern portion of said tract of land in order to protect said residue from further
19 damage and erosion due to saturation and the softening of the soil and wave action thereon.

(7) No condemnation proceeding has been instituted by or on behalf of the defendant for the purpose of acquiring title to any part of said tract of land or for the purpose of acquiring any flowage or other easement thereon; and no payment of any kind has been made to the plaintiff by reason of the matters herein detailed.

Whereof, plaintiff demands judgment against defendant for the sum of Three Thousand Five Hundred Dollars ($3,500.00).

(S) CAMPBELL, MCCLINTIC & JAMES,
(S) ERNEST K. JAMES,
Attorneys for the Plaintiff.

Address: Charleston Nat'l Bank Bldg., Charleston, West Virginia.

(Filed April 10, 1943.)

In United States District Court

Civil No. 280

Answer

FIRST DEFENSE

The complaint fails to state a cause of action upon which relief can be granted.

SECOND DEFENSE

I

Defendant admits that under the Acts of Congress collected in 20 U. S. C. A. 41 (20) the United States has consented to be sued upon claims based upon contracts, express or implied.

Defendant admits that under the Constitution of the United States, private property shall not be taken for public use without just compensation, but denies that the allegations in plaintiff's complaint are sufficient to show that private property has been so taken and appropriated, and avers and charges that if any property has been taken and appropriated by the elevation of the said Winfield Pool, such property at the time of the alleged taking and always theretofore had been subject to a servitude in favor of this defendant.

II

Defendant is without information sufficient to form an opinion with respect to the allegations in paragraph (2) of the complaint and therefore denies said allegations.

20

III

Defendant admits that plaintiff executed a deed dated March 15, 1941, to George F. White and Vera White but denies that said deed conveyed the "river bank." Defendant alleges that by deed dated October 9, 1941, recorded in the office of the Clerk of the County Court of Kanawha County, West Virginia, in Deed Book 593, page 341, plaintiff conveyed to George F. White and Vera White all of the property described in said paragraph (3) of the complaint.

IV

Defendant admits the allegations in paragraph (4) of the complaint except it declares the purpose of constructing the lock and dam commonly known as "Winfield Dam" to have been the improvement of navigation on the Kanawha River.

V

Defendant declares that on or about August 1937 the Winfield Dam was completed and put into operation and admits that the

pool stage above the dam was raised from a previous elevation of 554.65 feet above mean sea level, Sandy Hook datum, from time to time as follows:

October 21, 1936, to elevation 547.0
May 30, 1937, to elevation 556.0
October 20, 1937, to elevation 558.0
January 6, 1938, to elevation 563.15
August 26, 1938, to elevation 565.0
September 1, 1938, to elevation 565.5
September 22, 1938, to elevation 566.0

VI

Defendant admits that the pool stage has been raised as aforesaid and that the lands described in paragraph (2) of the complaint have been flooded to elevation 566 feet above mean sea level, Sandy Hook datum. Defendant admits that said flooding has covered 0.11 acre of the land lying between River Drive and the Kanawha River, described in paragraph (2) of the complaint. Defendant denies each and every other allegation in paragraph (6) of the complaint.

VII

Defendant admits the allegations in paragraph (7) of the complaint.

THIRD DEFENSE

Defendant further avers that the purpose of constructing said Winfield Dam and the consequent creation of a normal
21 pool stage of nine feet was the improvement of navigation on the Kanawha River and that such improvement of navigation has resulted in special and direct benefits to the plaintiff's property and has largely enhanced its value by making it more suitable as an industrial site and for the construction of a loading dock and other facilities for the receiving and shipping of material and other products.

FOURTH DEFENSE

Defendant alleges that the waters of the Kanawha River were not raised above the ordinary high water mark by the construction of the Winfield Dam and that the lands, if any, of said plaintiff are subject to a servitude in favor of the defendant up to the point of said ordinary high water mark.

FIFTH DEFENSE

Defendant charges and avers that the so-called "river bank tract", containing 0.27 acre, more or less, is a separate and distinct tract from the lots and other property described in the complaint,

and that Lots 201, 202, 203, 204, 205, 206, and 207, of Block F of Parkland, as described in paragraph (2) of the complaint, do not border on the Kanawha River but are separated from the so-called "river tract" by a strip of land fifty (50) feet wide, known as "River Drive", the fee simple title of which was retained by the Parkland Development Company, subject to the rights of property owners to use it as a street, and which lots have not been invaded, flooded, or affected by the elevation of the water in the Winfield Pool.

Wherefore, defendant prays that the complaint be dismissed and that it be awarded its costs.

(S) Charles M. Love, Jr.,
CHARLES M. LOVE, JR.,
Assistant United States Attorney,
Charleston, West Virginia.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice,
Charleston, West Virginia.

(Filed July 6, 1943.)

22 In United States District Court

Civil No. 280

Pre-trial order

By agreement of the parties, the Court reserves its decision on all matters of law, without prejudice to the rights of any party, until the introduction of evidence by both plaintiff and defendant shall have been concluded.

The plaintiff and defendant agree as follows:

I

The full name and residence of the plaintiff are as follows: F. H. Withrow, South Charleston, Kanawha County, West Virginia.

II

Plaintiff claims the right to maintain this action under the provisions of the Fifth Amendment to the Constitution of the United States, providing that private property shall not be taken for public use without just compensation; and also upon the ground that the defendant is liable upon an implied contract to pay such just compensation. The nature of the plaintiff's claim for just compensation is the alleged taking of certain lands and the improvements thereon, and damages to the residue of the tract and the improvements thereon by reason of such taking

and the use thereof for the purposes for which taken. Said lands and improvements are all in Kanawha County, West Virginia and claimed to be owned by the plaintiff in fee simple, free from liens and encumbrances at the time of the alleged taking and damage, and the lands to which said claim relates are those described in the complaint.

III

Jurisdiction is founded on Paragraph 20, Section 41, Chapter 2, Title 28 of the United States Code.

IV

During the year 1935, pursuant to an Act of Congress, approved August 30, 1935, House Document No. 31, 73d Congress, 1st session (Public No. 409, 74th Congress, H. R. 6732) entitled "An Act authorizing the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes" the defendant, acting through the Secretary of War and the Chief of Engineers, constructed and erected in the Great Kanawha River, at or near the Town of Winfield in Putnam County, West Virginia, a lock and dam commonly known as "Winfield Dam,"
for the purpose of improving navigation by impounding
23 the waters in said river above said dam in order to raise the pool stage of the river between said dam and a certain other dam in said river near Marmet, in Kanawha County, West Virginia.

V

Prior to May 30, 1937, normal pool stage of the Great Kanawha River at old Lock and Dam No. 7 was at elevation 554.65 feet above mean sea level, Sandy Hook datum, and this was the normal pool stage of said river at the plaintiff's property prior to the erection of the said Winfield Dam; that on May 30, 1937, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 556.0 feet above mean sea level; that on October 20, 1937, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 558.0 feet above mean sea level; that on January 6, 1938, by reason of the construction and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 563.15 feet above mean sea level; that on August 26, 1938, by reason of the construction and operation of the said Winfield Dam, the pool stage of said river at the plaintiff's property, was raised to elevation 565.0 feet above mean sea level; that on September 1, 1938, by reason of the construction

and operation of said Winfield Dam, the pool stage of said river at the plaintiff's property was raised to elevation 565.5 feet above mean sea level; and that on September 22, 1938, by reason of the construction and operation of said Winfield Dam, the present pool stage above the Winfield Dam, in the Winfield Pool and at the plaintiff's property, was attained, and such normal pool stage, since September 22, 1938, is elevation 566.0 feet above mean sea level, Sandy Hook datum. The present normal pool stage in said river, at the plaintiff's property, is 11.35 feet above the normal pool stage of old Lock and Dam No. 7 and 0.11 acre of the lands described in the complaint is permanently submerged thereby; and that the area of the land described in the complaint that is between elevation 566 and 574 is 0.04 acre.

VI

Old Lock and Dam No. 7 was constructed on or about the ------ day of ----------, 1893, and said Lock and Dam was designed and operated to raise the stage of the Kanawha River approximately 5 feet at plaintiff's property.

24

VII

No condemnation proceeding has been instituted by or on behalf of the defendant for the purposes of acquiring title to any part of such land or for the purpose of acquiring any flowage or other easement thereon; and no payment of any money has been made to the plaintiff.

VIII

The parties stipulate and agree that the defendant will obtain, through its Engineering Corps, and submit in tabulation form, official data and information with reference to maximum water elevation and frequency of same in the Kanawha River, at the plaintiff's property, such data to include, at least, data comparable to that supplied and attached to the pre-trial order of this Court in the case of John A. Willis, et al., Plaintiffs v. United States of America, Defendant, Civil Action File No. 85; that such data may be treated as in evidence, subject to such objection as counsel for either plaintiff or defendant may make, and with the further right to each party to examine or cross-examine the engineer or other official responsible for its preparation, either with regard to said tables or records or his calculations.

IX

The plaintiff contends that he is entitled to:

(1). Just compensation for all of his lands and the improvements thereon lying between ordinary high water mark in the

Kanawha River, in its natural state, and elevation 566 feet above mean sea level which have been permanently submerged by the construction and operation of the Winfield Dam;

(2) Just compensation for the right and easement to subject his lands lying between elevation 566 feet and 574 feet above mean sea level to more frequent overflow than previous to the construction of the Winfield Dam;

(3) Damages to the residue of his tract of land and the improvements thereon caused by and which are the proximate result of the taking of the part appropriated or the use thereof for the purposes taken, and which damages include:

(a) Damages by reason of the severance of the part taken;

(b) Erosion due to saturation and softening of the soil and wave action thereon;

(c) The reasonable cost of protective measures necessary to prevent further such erosion.

Plaintiff further contends that the "river bank" between River Drive and low-water mark on the Great Kanawha River in front of lots 201, 202, 203; 204, 205, 206, and 207 of Block F, of Parkland Addition, as described in the complaint, is part of said lots respectively and that, for purposes of this suit, said river bank and the lot it fronts on are to be treated as one tract of land.

X

The defendant denies all liability on all of plaintiff's claim except that for the land lying above elevation 554.65 feet above mean sea level which is permanently flooded or intermittently flooded at such frequency and for such duration as to be considered taken by reason of the construction, operation and maintenance of the Winfield Dam and defendant denies liability for the full value of the fee title or a flowage easement over the land.

The grounds of the defense are:

1. That by the construction and operation of Lock and Dam No. 7 and the maintenance of the pool behind it at elevation 554.65 for more than_____years the United States acquired the right by eminent domain or by adverse possession or prescription to maintain the pool at that level without liability.

2. That to the extent that lands lying above elevation 554.65 were intermittently flooded prior to the construction of the Winfield Dam by reason of the operation and maintenance of Lock and Dam No. 7 the United States had acquired by eminent domain, adverse possession or prescription the right to flood intermittently and the value of plaintiff's interest in those lands, if any, was reduced accordingly.

3. That all of plaintiff's claims (except for land permanently flooded or intermittently flooded at such frequency and for such duration as to be considered taken above elevation 554.65 feet above mean sea level) are for consequential damage or sound in tort.

4. That all damage for which plaintiff claims (other than for lands permanently flooded or intermittently flooded at such frequency and for such duration as to be considered taken) could have been prevented by appropriate protective measures which were and are both practically and economically feasible.

5. That the defendant is not liable for the cost of protective measures either actually erected by plaintiff or not erected but made necessary by the construction and operation of the Winfield Dam and the maintenance of the pool behind it.

6. The defendant further contends that the so-called "river bank tract," containing 0.27 acres, more or less, is a separate and distinct tract from the lots and other property described
26 in the complaint, and that lots 201, 202, 203, 204, 205, 206 and 207 of Block F of Parkland Addition, as described in paragraph (2) of the complaint, do not border on the Kanawha River but are separated from the so-called "river bank tract" by a strip of land 50 feet wide, known as "River Drive," the fee simple title of which was retained by the Parkland Development Company, subject to the rights of property owners to use it as a street, and which lots have not been invaded, flooded, or affected by the elevation of the water in the Winfield pool.

Enter: 18th day of April, 1944.

(S) BEN MOORE, *District Judge.*

Approved:

(S) Leslie E. Given,
LESLIE E. GIVEN,
United States Attorney.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice.

(S) Ralph S. Boyd,
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Attorney, Department of Justice.

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Attorney, Department of Justice,
Attorneys for Defendants.

(S) CAMPBELL, MCCLINTIC & JAMES,
(S) ERNEST K. JAMES,
Attorneys for Plaintiffs.

27 *Kanawha River, W. Va., Winfield Pool, Parcel No. 1012, Mile 52.7. F. H. Withrow v. United States of America. Civil Action File No. 280. Maximum yearly high water elevations. Calendar order— 1887 to 1936 incl.*

[Data referred to in Pre-trial Order, par. VIII—Civil No. 280]

Year	Date	Highest stage in feet	Time	Elevation at Lock No. 6	Elevation at parcel 1012
1887	4 Feb	28.85	8:00 a. m	576.75	575.75
1888	28 Oct	24.20	8:00 a. m	572.10	571.10
1889	1 June	35.70	4:00 p. m.*	583.60	582.60
1890	23 Mar	36.70	9:00 a. m	584.60	583.60
1891	3 Jan	32.20	2:00 a. m	580.10	579.10
1892	15 Jan	34.60	3:00 p. m	582.50	581.50
1893	18 Feb	35.65	12:00 Noon	583.55	582.55
1894	5 Feb	25.20	8:00 a. m	573.10	572.10
1895	9 Apr	32.95	8:00 a. m	580.85	579.85
1896	31 Mar	33.60	6:30 p. m	581.50	580.50
1897	22 Feb	48.80	Midnight	596.70	595.70
1898	11 Aug	38.00	8:00 a. m	585.90	584.90
1899	5 Mar	48.90	10:00 p. m.*	596.80	595.80
1900	27 Nov	38.50	8:00 a. m	586.40	585.40
1901	23 May	45.70	3:00 p. m	593.60	592.60
1902	1 Mar	44.70	6:00 p. m.*	592.60	591.60
1903	24 Mar	36.50	8:00 a. m	584.40	583.40
1904	28 Apr	21.40	8:00 a. m	569.30	568.30
1905	13 May	35.20	8:00 a. m	583.10	582.10
1906	25 Jan	34.70	8:00 a. m	582.60	581.60
1907	14 June	48.00	10:00 p. m.*	0	587.90
1908	2 Apr	39.00	2:00 a. m.*	586.90	585.90
1909	2 May	23.20	8:00 a. m	571.10	570.10
1910	18 June	30.05	Midnight	577.95	576.95
1911	31 Jan	34.90	1:00 a. m.*	581.90	580.90
1912	17 Mar	33.50	2:00 a. m	581.40	580.40
1913	28 Mar	42.90	6:00 p. m	590.80	589.80
1914	20 Feb	26.70	4:00 p. m	574.60	573.60
1915	3 Feb	38.00	4:00 p. m	585.90	584.90
1916	17 July	36.80	5:30 p. m	586.70	585.70
1917	5 Mar	37.00	8:00 a. m	584.90	583.90
1918	14 Mar	44.60	3:30 a. m	592.50	591.50
1919	2 Jan	43.60	9:15 p. m	591.50	590.50
1920	23 Jan	34.75	2:00 p. m	582.65	581.65
1921	25 Dec	33.20	4:00 p. m	581.10	580.10
1922	22 Feb	26.70	7:00 p. m	574.60	573.60
1923	4 Feb	31.00	10:00 a. m	578.90	577.90
1924	13 May	37.75	12:00 Noon	585.45	584.45
1925	16 Feb	21.20	8:00 a. m	569.10	568.10
1926	27 Dec	35.55	1:00 a. m	583.65	582.65
1927	24 Feb	30.40	8:00 a. m	578.30	577.30
1928	1 May	30.90	8:00 a. m	577.90	576.90
1929	3 Oct	37.25	Midnight	585.15	584.15
1930	6 Feb	23.40	8:00 a. m	569.30	568.30
1931	6 Apr	23.20	8:00 a. m	571.10	570.10
1932	5 Feb	36.75	8:00 p. m	584.65	583.65
1933	21 Mar	31.50	8:00 a. m	579.40	578.40
1934	6 Mar	37.90	3:00 p. m	585.80	584.80
1935	24 Jan	35.40	8:00 a. m	583.30	582.30
1936	18 Mar	38.90	1:30 p. m	586.80	585.80

Average yearly high-water elevation = 581.45.
The maximum flood of record at Parcel No. 1012, occurred September 1861 and reached elevation 601.2.
NOTE: *Estimated from Charleston gage records.

28 *Kanawha River, W. Va., Winfield Pool, Parcel No. 1012, Mile 52.7. F. H. Withrow v. United States of America. Civil Action File No. 280. Maximum yearly high water elecations*

FREQUENCY TABLE

[Data referred to in Pre-trial Order, par. VIII—Civil No. 280]

Hydrographs of all open river rises that occurred during the 50-year period of record, 1887-1936 incl. were plotted and a tabulation made showing the number of times that the open river rises equalled or exceeded various elevations, as follows:

Stage in feet at Old Lock No. 6 Lower Pool	Elevation of W. S. at Old Lock No. 6 Lower Pool	Number of rises in 50-year continuous period	Frequency of occurrence in years	Elevation of W. S. at Parcel No. 1012
8	555.9	905	0.055	554.9
9	556.9	869	.058	555.9
10	557.9	769	.066	556.9
11	558.9	696	.072	557.9
12	559.9	652	.077	558.9
13	560.9	601	.083	559.9
14	561.9	548	.091	560.9
15	562.9	479	.104	561.9
16	563.9	424	.118	562.9
17	564.9	362	.138	563.9
18	565.9	323	.155	564.9
19	566.9	288	.174	565.9
20	567.9	262	.191	566.9
21	568.9	238	.210	567.9
22	569.9	209	.239	568.9
23	570.9	192	.260	569.9
24	571.9	160	.312	570.9
25	572.9	139	.360	571.9
26	573.9	127	.394	572.9
27	574.9	111	.450	573.9
28	575.9	97	.515	574.9
29	576.9	84	.595	575.9
30	577.9	76	.657	576.9
31	578.9	71	.705	577.9
32	579.9	63	.794	578.9
33	580.9	53	.944	579.9
34	581.9	43	1.161	580.9
35	582.9	35	1.43	581.9
36	583.9	27	1.85	582.9
37	584.9	22	2.27	583.9
38	585.9	18	2.78	584.9
39	586.9	13	3.85	585.9
40	587.9	11	4.55	586.9
41	588.9	9	5.56	587.9
42	589.9	8	6.25	588.9
43	590.9	7	7.14	589.9
44	591.9	5	10.0	590.9
45	592.9	3	16.67	591.9
46	593.9	2	25.0	592.9
47	594.9	2	25.0	593.9
48	595.9	2	25.0	594.9
49	596.9			595.9

A frequency curve was plotted from this tabulation showing that during the 50-year period of continuous record, an open river rise having an average frequency of occurrence one each year, would rise to or exceed a stage of 33.1 feet or elevation 581.0 at Old Lock No. 6, and to elevation 580.0 feet or greater at Parcel No. 1012, based on the average fall of the river from Old Lock No. 6 to Parcel No. 1012 which is 1.0 foot.

29 In United States District Court

Civil No. 280

Motion to strike evidence

Comes now the defendant, the United States of America, and moves the court to strike from the record in the above entitled action:

I

All of the plaintiff's evidence of the value of land below elevation 566 for which Withrow claims, because all such evidence is of the value of the land on September 22, 1938, a date unrelated to any taking.

II

All evidence as to land lying between elevations 566 and 574

(a) because there is no evidence of any taking between those elevations,

(b) because there is no evidence that any land between those elevations has been or will be affected at all by the construction and operation of Winfield Dam,

(c) because the only evidence that the land above 566 could be affected by the operation of the dam shows that the limit of possible effect is 572.1,

(d) because none of such evidence purports to show, to be based upon or to have taken into consideration either the frequency or duration of the intermittent flooding with which it dealt or the amount of damage to the land resulting from such flooding.

III

All evidence of the cost of riprapping, filling or other protective measures

(a) because the United States is not liable for such costs and damages,

(b) because in any event no sufficient foundation for the claim was laid since there is no evidence of the extent of the damage to be prevented by such measures.

IV

All evidence as to values given by plaintiff's witness, George F. Skidmore,

(a) because his own testimony shows that he used a wholly artificial and inadmissible method of reaching his valuations,

(b) because his own testimony shows that his testimony

30 dealt with a hypothetical lot in a hypothetical place, differ-

ent in shape, location, elevation, contour and usefulness from the land in question.

(S) Leslie E. Given,
LESLIE E. GIVEN,
United States Attorney.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice.

(S) Ralph S. Boyd,
RALPH S. BOYD,
Attorney, Department of Justice.

(Filed February 22, 1945.)

In United States District Court

Civil No. 280

Motion for judgment or for dismissal of complaint

Comes now the defendant, the United States of America, and moves the court to enter judgment in its favor and against the plaintiff, or, in the alternative, to dismiss the complaint for want of jurisdiction for the reason that the pleadings, stipulations and evidence show that the action was not commenced within six years of the date when the cause accrued.

(S) Leslie E. Given,
LESLIE E. GIVEN,
United States Attorney.

(S) John R. Dyer,
JOHN R. DYER,
Special Attorney, Department of Justice.

(S) Ralph S. Boyd,
RALPH S. BOYD,
Attorney, Department of Justice.

(Filed February 22, 1945.)

31 In United States District Court

Civil No. 280

Judgment

This day came the plaintiff, F. H. Withrow, by Campbell, McClintic & James, his attorneys, and the defendant, United States of America, by Leslie E. Given, United States Attorney, and John R. Dyer, Special Attorney, Department of Justice, and thereupon the plaintiff, by counsel, tendered his motion in writing to exclude

certain evidence of the defendant in said written motion set forth and upon the grounds therein assigned, which motion is hereby filed, and the Court having considered the matters of law arising upon said motion and the argument of counsel thereon, doth overrule said motion, and to the action of the Court in overruling said motion, the plaintiff, by counsel, objects and excepts.

Thereupon the defendant, by counsel, tendered its motion in writing to strike certain evidence of the plaintiff in said written motion set forth and upon the grounds therein assigned, which motion is hereby filed, and the Court having considered the matters of law arising upon said motion and the argument of counsel thereon, doth overrule said motion, and to the action of the Court in overruling said motion, the defendant by counsel, objects and excepts.

Thereupon the defendant, by counsel, tendered its motion in writing for a judgment or for dismissal of the complaint upon grounds in said motion assigned, which motion is hereby filed, and the Court having considered the matters of law arising upon said motion and the argument of counsel thereon, doth overrule said motion, and to the action of the Court in overruling said motion, the defendant, by counsel, objects and excepts.

And the Court having maturely considered the briefs and argument of counsel for the respective parties, and being of opinion that the plaintiff is entitled to recover from the defendant the sum of $2,094.40, with interest thereon at the rate of 6% per annum from the 22nd day of September, 1938, until the rendition of this judgment, with interest on such aggregate or judgment at the rate of 4% per annum from this the 22nd day of February 1945 until the time when an appropriation is made for the payment of said judgment, and the Court having rendered in writing its findings of facts and conclusions of law herein and having written a letter dated December 14, 1944 wherein its reasons for its findings and its conclusions were stated, and having adopted said letter,

findings and conclusions as its opinion herein, the same are
32 hereby ordered filed as part of the record of this action; and

it is further considered by the Court and so ordered that the plaintiff, F. H. Withrow, do recover of and from the defendant, the United States of America, the sum of $2,900.74, with interest thereon at the rate of 4% per annum from this the 22nd day of February, 1945 until the time when an appropriation is made for the payment of said judgment, and his costs in this behalf actually incurred for witnesses and for summonsing the same and for fees paid to the Clerk of this Court, such costs amounting in the aggregate to the sum of $10.00.

And it is further considered by the Court, and so ordered, that upon the payment of the sums of money aforesaid, the defendant,

United States of America, shall be entitled to and it shall thereupon be vested with the perpetual and full right and easement to use in aid of navigation on the Great Kanawha River, by means of the construction and operation of the present dam at Winfield, or otherwise, so much of the land of F. H. Withrow described in the complaint filed herein as lies between elevations 554.65 feet and 566.0 feet, above mean sea level, Sandy Hook Datum, as the same existed on the date of the taking, namely, on September 22, 1938, and containing 0.11 acres, more or less; and that as to the said land of F. H. Withrow described in said complaint lying between elevations 566.0 feet and 574.0 feet, above mean sea level, Sandy Hook Datum, as the same existed on the date of the taking, namely, on September 22, 1938, and containing 0.04 acres, more or less, the United States of America shall thereupon be entitled to and shall be vested with a perpetual easement for such use (not constant flowage, however, as may result from the construction and operation of said Winfield Dam in aid of navigation on said Great Kanawha River.

To which action of the Court in rendering judgment for the plaintiff, the defendant, by counsel, objects and excepts, assigning grounds therefor:

1. That the Court erred in overruling its motion to strike certain evidence of the plaintiff in said written motion set forth.

2. That the Court erred in overruling its motion for a judgment or for dismissal of the complaint upon the grounds therein assigned.

3. That the Court erred in not describing the property over which the defendant acquires the aforesaid easement as the property is shown and delineated upon a map thereof filed as part of the evidence herein, as plaintiff's Exhibit Eleven.

33 4. That said judgment is contrary to the law and the evidence.

And for other reasons assigned at the bar of the Court.

And for reasons aforesaid, the defendant moved the Court to set aside said judgment and award it a new trial, which motion the Court overrules and the defendant excepts.

Enter: February 22, 1945.

(S) BEN MOORE, *District Judge.*

In United States District Court

[Consolidated]

Plaintiffs' formal motion to exclude testimony and formal exceptions to testimony

Comes now the plaintiffs, William M. Dickinson and Frank H. Withrow, by their attorneys, and formally move that certain of

the testimony heard in open court in this case, and reported in a typewritten transcript made by the official reporter, duly appointed by the Court, be excluded and be not heard as follows:

1. Page 298, the following stipulation in connection with the London and Marmet Locks:

"Mr. JAMES. The plaintiffs, Dickinson and Withrow without conceding the materiality of such testimony stipulate and agree that Walter T. Leonhart is a competent witness, and that if present he would testify that the total cost of the London locks and dam was $2,939,630.33, that the total cost of the Marmet locks and dam was $2,742,368.29; that the cost of the Winfield locks was $2,135,275.63, and the cost of the Winfield dam was $1,995,548.70, making a total cost for Winfield locks and dams of $4,130,824.33. Said plaintiffs further stipulate and agree that the Court may treat this data as evidence in this case as though so testified by said Walter T. Leonhart, but subject to a motion on behalf of said plaintiffs to strike said evidence and each part thereif, on the ground that it is immaterial to the issues involved in this consolidated proceeding."

2. Page 312, the following question by Mr. Boyd addressed to the witness Carpenter:

"Q. So that the stage at the dam may be at one level or another and the hydro-electric plant may or may not be able to take care of it, depending on the flow of the river?

34 Mr. JAMES. If your Honor please, I think this is going just a little far with his own witness.

The COURT. Well, I will overrule the objections to it. The questions are leading, but I think probably necessary."

3. Page 338, the following question addressed to witness Rogers:

"Q. What area of the land owned by Dickinson in 1936, before the pool stage was raised by Winfield Dam, is now submerged?

Mr. JAMES. If your Honor please, the plaintiffs object to this line of testimony on the ground that the rights of the parties here are to be determined as of the date of the taking, and it is our position that the matter of reclamation that has gone on since then at the expense of the property owner for which the Government is not being charged for is entirely immaterial so far as the issues in this proceeding are concerned.

The COURT. I will reserve ruling on that point and permit it to be offered."

4. Page 345, in connection with the testimony of witness Rogers:

"Q. The 1944 water line which you show on your map is the one that you established about two weeks ago?

A. That's right, sir.

Q. And the other, which you have labelled 1936, purports to be the old water's edge, prior to the raising of the pool?

A. Yes, sir; that's right.

Q. Which would be 554.65?

A. That's right.

Q. On your cross-section maps there, Mr. Rogers, when did you get your information for the original base line, or your original bank line?

A. 1936.

Q. And the other one you got just two weeks ago?

A. Yes, sir.

Mr. JAMES. At this point, if your Honor please, the plaintiffs wish to move to strike all of this witness' testimony relative to conditions as they exist now there on the filling of the land or the reclamation of the land, on the grounds that the defendant has stipulated in the pre-trial order the amount of land that was permanently flooded as of the date of the taking, and that the filling that the plaintiff has done since that time, not at the
35 expense of the Government, does not affect the rights of the parties to be determined in this suit. On that ground we think all of this evidence is immaterial.

The COURT. The pre-trial order is always subject to modification if the interests of justice require it. This is a legal proposition, the question that has been raised in connection with that situation about the filling, and I will reserve ruling on it until I come to decide the case."

5. Page 396, the following statement by Mr. Boyd who offered on behalf of the Government a notice to permit holders of the raising of the pool stage:

"Mr. BOYD. We now offer to introduce a notice to holders of permits, dated July 1, 1936, carrying the acknowledgement of receipt of Mr. Withrow dated July 9, 1936.

Mr. JAMES. We object to the introduction of this. This is a notice to holders of permits on the river front, it is not any notice to property owners on the river bank. We are concerned with property owners here. I have seen that notice, and it is a notice directed to those who had been issued permits for construction projects along the navigation stream of the Kanawha River.

The COURT. What is it a notice about?

Mr. JAMES. A notice that the stage of the river will be raised, and to what extent it will be raised.

The COURT. Well, I presume the only purpose of it is to show that Mr. Withrow had notice at a certain date that there would be a maximum elevation carried through up to 566 feet elevation.

Mr. BOYD. It is also offered for the purpose, your Honor, of showing that the Government, through the District Engineer,

gave a notice in unequivocal terms stating the intention of the Government to raise the water to the final pool elevation, 566, upon completion of the dam, without the performance of any other condition.

The COURT. Well, I can't see that it makes any difference whether Mr. Withrow got that as the holder of a permit or as a property owner, if he got it. I overrule the objection."

6. Page 414, evidence adduced as follows:

"By Mr. DYER:

Q. I want to ask an omitted question. I want to ask you, Mr. Brown, if it is assumed that the date of taking or the date the water was impounded in the Winfield Dam was October 21, 1936, would you make any difference in your valuation between that date and September 22, 1938, in what you have already stated?

36 A. There was some rise in property values at that time between 1936 and 1938. I would not make any material change.

Mr. JAMES. Of course, your Honor, we want to note an objection to that question on the ground that it would be an improper basis.

The COURT. Ruling reserved.

Mr. DYER. I understand the date of the taking has not been decided by the Court.

Mr. JAMES. That's right.

Mr. DYER. Q. Could you tell the Court just about what percent of increase would take place from 1936 to 1938 in land values, approximately.

The COURT. He has said that he would not make any appreciable change, so it seems to me——

The WITNESS. Five or ten cents—something that way.

Mr. DYER. I will withdraw that question, then.

Q. Mr. Brown, it is in evidence—I don't know whether you heard it or not—that of the .22 acre of the Dickinson property which was flooded by the elevation of water when the water first came up on it, there is only .05 acre now flooded since the fill was placed in there by Mr. Dickinson. What, in your opinion, would the .05 acres which is now flooded of the Dickinson property, being the remainder of the .22 acre, be worth as of September 22, 1938?

Mr. JAMES. If your Honor please, I don't want to continually interrupt. I just want to be clear—it is understood we are going to have an opportunity to make all our objections after the evidence is written up?

The COURT. That's right. We understand you object to this question, and the ruling is reserved.

A. The value would be as it is now, $58.50 valued per acre on .05 acre, as I understand it."

7. Page 419, evidence adduced as follows:

"Q. Mr. Pelzel, there has been some testimony in the case that of the .22 acre of the Dickinson property there is only .05 of that part now under water. State in your opinion what would be the fair market value of the .05?

Mr. JAMES. May the record show the same objection, your Honor?

The COURT. Yes.

A. $55."

37 8. Page 425, evidence adduced as follows:

"Q. It has been in evidence, Mr. DeWitt, that there is .05 acre of the Dickinson .22 acre which is under water now and the rest of it is above water by reason of the improvements put in. What, in your opinion, would be the fair market value of the .05 acre which is under water as of September 22, 1938?

Mr. JAMES. The same objection there, your Honor.

The COURT. All right."

And the plaintiffs now here formally except to any and all rulings of the Court receiving in evidence the testimony to which the plaintiffs objected, and to the excluding and refusing to receive in evidence testimony proffered by the plaintiffs.

The plaintiffs will make a detailed assignment of grounds in support of their motions, objections, and exceptions herein, in oral argument and in their brief.

This the 31 day of October, 1944.

WILLIAM M. DICKINSON,
FRANK H. WITHROW,
By their Attorneys.

CAMPBELL, MCCLINTIC & JAMES,
ERNEST K. JAMES,
Charleston, West Virginia.

(Filed February 22, 1945.)

United States District Court Southern District of West Virginia, Charleston 29, West Virginia, Chambers of Ben Moore, District Judge

DECEMBER 14, 1944.

John R. Dyer, Esq., Special Attorney, Department of Justice, Charleston, West Virginia.

Ralph S. Boyd, Esq., Department of Justice Lands Division, Washington 25, D. C.

Campbell, McClintic & James (Ernest K. James, Esq.), Charleston National Bank Building, Charleston, West Virginia.

In Re: William M. Dickinson v. United States of America, and Frank H. Withrow, v. United States of America, Nos. 278, 280

GENTLEMEN: After full and careful consideration of this case, I have come to the following conclusions:

1. Defendant's motions for judgment or for dismissal of complaint will be overruled.

38 2. Defendant's motion to strike evidence in the Dickinson case will be overruled, except as to paragraph V and VI. The motion as to evidence referred to in paragraphs V and VI will be sustained.

3. Defendant's motion to strike evidence in the Withrow case will be overruled.

4. Defendant's motion to exclude testimony will be overruled as to both cases.

5. The proposed findings of fact and conclusions of law submitted by the plaintiffs will be adopted by the Court with some modifications. I enclose herewith the Court's findings of fact and conclusions of law.

6. Judgment will be entered for plaintiff Dickinson in the amount of $4,720.63, with interest at 6% per annum from September 22, 1938.

7. Judgment will be entered for plaintiff Withrow in the amount of $2,094.40, with interest at 6% per annum from September 22, 1938.

These amounts are arrived at as follows:

In the Dickinson case, after consideration of all the evidence, I conclude that the land permanently flooded was worth $400, and that the easement for intermittent flooding of land between elevations 566 and 574 was valued at $75. I further conclude from the evidence that in order to give reasonable protection against erosion, it is necessary that the riprapping be extended only to elevation 569 feet. This places it three feet above the point of permanent flooding, and is intended to allow for the effects of wave action, which, according to the witness Fortney, would probably extend 3 feet above the surface of the water. The calculation is made as follows: The vertical elevation between 554.65 and 569 is 14.35 feet. On the basis of a two-on one slant, the width of the riprapping on the bank would be 28.7 feet. With a thickness of 1.5 feet there would be 43.05 cubic feet of riprapping for each lineal foot of river bank. The toe wall requires 27 cubic feet for each

lineal foot, making a total of 70.95 cubic feet, or 2.6 cubic yards of stone for each lineal foot of river bank. I conclude from the testimony that $3.75 per cubic yard was the reasonable cost of installing the stonework, and 58¢ per lineal foot was the reasonable cost of excavating for the toe wall. The resulting figure is $10.33 per lineal foot of river bank, which, multiplying by 411 feet, produces the figure of $4,245.63.

In the Withrow case, after consideration of all the evidence, I conclude that the land permanently flooded was worth $200, and that the easement for intermittent flooding was valued at
39 $35. The calculation as to the cost of the protective work is made on the same basis as in the Dickinson case; namely, $10.33 for each lineal foot of river bank, which, when multiplied by 180, produces the figure $1,859.40.

A suitable order may be prepared and presented for entry.

Yours truly,

BEN MOORE, *District Judge.*

BM/P.

(Filed February 22, 1945.)

In United States District Court

[Consolidated]

Findings of fact and conclusions of law

The Court having heard these cases, upon the evidence, makes the following:

Findings of fact with respect to Dickinson case

1. The plaintiff, William M. Dickinson, is, and was at all times mentioned in the complaint, a resident of the City of South Charleston in Kanawha County, West Virginia.

2. The plaintiff is, and has been since August 16, 1937, the owner of the title in fee simple to the tract of land described in said complaint, situate in the City of South Charleston bounded on the north by the low-water mark of Kanawha River for a distance of 411 feet, and containing approximately 3.1 acres. Said tract of land is free and clear of liens and encumbrances. Plaintiff acquired the property for residential and business purposes, and, between the date of purchase and September 22, 1938, made substantial improvements thereon in the form of grading and filling, construction of storm and sanitary sewers, water and gas lines, the installation of a 3,400 gallon gas tank and filling station, and the erection of a large residence (only partially complete) near the top of the river bank.

3. The Kanawha River is, and has been at all times herein material, a navigable stream. On or about the year 1893 the defendant constructed in the Kanawha River, a short distance below plaintiff's property, Old Lock and Dam No. 7 which was designed and operated to raise the stage in the Kanawha River approximately 5 feet at plaintiff's property, and which pool stage was at elevation 554.65 feet above mean sea level, Sandy Hook datum. Plaintiff's lands lying above elevation 554.65 feet were not intermittently flooded by reason of the operation and maintenance of Old Lock and Dam No. 7.

40 4. Prior to May 12, 1934, and pursuant to an Act or Acts of Congress, the defendant, acting through the Secretary of War and the Chief of Engineers, constructed and erected in the Kanawha River at or near London in Fayette County and at or near Marmet in Kanawha County, respectively, similar locks and dams commonly known as "London Dam" and "Marmet Dam," respectively, for the purpose of improving navigation in the Kanawha River, but neither the construction nor the operation of said dams, or either of them, changed the pool stage of the Kanawha River at plaintiff's property or affected said property in any respect.

5. Pursuant to an Act of Congress, approved August 30, 1935, House Document No. 31, 73rd Congress, First Session (Public No. 409, 74th Congress, H. R. 6732) entitled "An Act authorizing the construction, repair and preservation of certain public works on rivers and harbors and for other purposes," the defendant, acting through the Secretary of War and the Chief of Engineers, constructed and erected in the Great Kanawha River, at or near the Town of Winfield in Putnam County, West Virginia, a lock and dam commonly known as "Winfield Dam" for the purpose of improving navigation by impounding the water of said river above said dam in order to raise the pool stage in the river between said dam and the dam in said river near Marmet in Kanawha County, West Virginia.

6. The construction of said Winfield Dam was completed and the dam inspected and officially accepted by the Federal Government on August 20, 1937. By its construction and operation the pool stage of the Kanawha River at plaintiff's property was raised by gradual stages from a previous elevation of 554.65 feet (pool of Old Lock and Dam No. 7) to its present elevation of 566 feet above mean sea level (Sandy Hook datum), namely: On May 20, 1937, to elevation 556 feet; on October 20, 1937, to elevation 558 feet; on January 6, 1938, to elevation 563.15 feet; on August 26, 1938, to elevation 565.0 feet; on September 1, 1938, to elevation 565.5 feet; and on September 22, 1938, to elevation 566.0 feet.

7. The present normal pool stage of the Kanawha River at plaintiff's property is 11.35 feet above the normal pool stage of Old Lock and Dam No. 7, and 0.22 acre of plaintiff's land, as described in the complaint, was permanently submerged thereby. 0.10 acre of the plaintiff's land, lying between elevation 566 feet and elevation 574 feet above mean sea level, would be flooded intermittently as a result of the manipulation of certain mov-
41 able parts of the Winfield Dam. The fair market value as of September 22, 1938, of the 0.22 acre permanently flooded was $400.00, and the fair market value, as of September 22, 1938, of a flowage easement to flood intermittently said 0.10 acre was $75.00. There are no special and direct benefits to the residue of plaintiff's land arising from the construction and operation of said Dam.

8. During the latter raises in the stage of the Kanawha River at plaintiff's property, as detailed in paragraph 6 above, and following the attainment of the present or permanent pool stage (elevation 566 feet above mean sea level), considerable erosion of the river bank of plaintiff's property occurred. Between 5,000 and 7,000 cubic yards of the river bank broke off and slipped into the river, approximately 30 trees, ranging in diameter from 6 inches to a foot and a half, slipped into the river or were destroyed, and a large crack developed in the earth above the top of the river bank extending through the foundation of plaintiff's residence doing substantial damage thereto. Said erosion and damage to the residue of plaintiff's property was due to saturation and softening of the soil and wave action thereon and was the direct and proximate result of the permanent flooding of said 0.22 acre of plaintiff's land.

9. During the early part of 1940 plaintiff secured a permit from the Secretary of War of the United States and proceeded to install protective work along his river bank to prevent further erosion of his property. The protective measures consisted of approximately 8,000 cubic yards of earth fill at a cost of $.65 per cubic yard, 8,000 cubic yards of rock fill at a cost of $1.65 per cubic yard, and several brick retaining walls near the top of the river bank. The brick walls serve for development or beautification of the property rather than for protection. The earth and rock fill serve only to protect the residue of plaintiff's property. The earth and rock fill exceeded in quantity the amount of the river bank that eroded and washed into the river so that all of the 0.22 acre originally submerged has, in effect, been reclaimed except 0.05 acre.

10. Appropriate protective work along plaintiff's river bank could have been installed, prior to the raising of the pool stage in the Kanawha River, which would have prevented all of the erosion

and damage to the residue of plaintiff's property, both what has already occurred, and what might be reasonably expected to occur in the future. A rock toe wall 4½ feet deep and 6 feet wide at the old pool level, and stone riprapping with an average thickness of 18 inches extending from the toe wall up the river bank to elevation 569 feet, above mean sea level, would have afforded such
42 protection. The cost of such protective work, as of September 22, 1938, was approximately $10.33 per lineal foot or a total of $4,245.63 for the river frontage of 411 feet.

11. In view of the character and value of plaintiff's property, as of September 22, 1938, it would have been sound economy to expend the sum of $4,245.63 to protect the residue of plaintiff's property against erosion and damage.

12. No condemnation proceeding has been instituted by or on behalf of defendant for the purpose of acquiring title to any part of said tract of land or for the purpose of acquiring any flowage or other easement thereon; and no payment of any kind has been made to the plaintiff by reason of the matters herein detailed.

Findings of fact with respect to Withrow case

1. The plaintiff, Frank H. Withrow, is, and was at all times mentioned in the complaint, a resident of South Charleston in Kanawha County, West Virginia.

2. Between the dates of February 6, 1934, and March 15, 1941, plaintiff was owner of the title in fee simple to the tract of land described in said complaint, situate in the City of South Charleston, comprised of Lots 201, 202, 203, 204, 205, 206 and 207 of Block F of the Parkland Addition, and 5 feet off the east side of Lot 10 of the Settle Subdivision of Spring Hill which adjoins the western boundary of said Lot 201 of the Parkland Addition, together with the "River Bank" in front of said lots between River Drive and low-water mark on said Kanawha River, and which said lots and River Bank have a frontage of 180 feet on said Kanawha River. Said River Bank and lots are contiguous, and, for purposes of this action, are to be treated as one tract of land; and are free and clear of liens and encumbrances.

3. The Findings of Fact with respect to the Dickinson case, as set forth in paragraphs 3, 4, 5, 6 and 12 thereof, are applicable in all respects to the case of Withrow.

4. The present normal pool stage of the Kanawha River at plaintiff's property is 11.35 feet above the normal pool stage of Old Lock and Dam No. 7 and 0.11 acre of the plaintiff's land, as described in the complaint, was permanently submerged thereby. 0.04 acre of the plaintiff's land, lying between elevation 566 feet and elevation 574 feet above mean sea level, will be flooded intermittently as a result of the manipulation of certain movable parts

of the Winfield Dam. The fair market value, as of September 22, 1938, of the 0.11 acre permanently flooded was $200.00, and the fair market value, as of September 22, 1938, of the flowage easement to flood intermittently said 0.04 acre was $35.00. There are no special and direct benefits to the residue of plaintiff's land arising from the construction and operation of said Dam.

5. During the latter raises in the stage of the Kanawha River at plaintiff's property, and following the attainment of the present or permanent pool stage (566 feet above mean sea level) considerable erosion of the river bank of plaintiff's property occurred. A substantial part of the river bank broke off and slipped into the river, approximately 20 trees, ranging in diameter from 6 inches to 24 inches, slipped into the river or were destroyed, and the unpaved portion of River Drive near its dead end in front of plaintiff's residence subsided from 4 to 8 inches. Said erosion and damage to the residue of plaintiff's property was due to saturation and softening of the soil and wave action thereon, and was the direct and proximate result of the taking of the 0.11 acre permanently flooded of plaintiff's said property.

6. Approximate protective work along plaintiff's river bank could have been installed, prior to the raising of the pool stage in the Kanawha River, which would have prevented all of the erosion and damage to the residue of plaintiff's property. A rock toe wall 4½ feet deep and 6 feet wide at the old pool level, and stone riprapping with an average thickness of 18 inches extending from the toe wall up the river bank to elevation 569 feet, above mean sea level would have afforded such protection. The cost of such protective work, as of September 22, 1938, was approximately $10.33 per lineal foot or a total of $1,859.40 for the river frontage of 180 feet.

7. In view of the character and value of plaintiff's property, as of September 22, 1938, it would have been sound economy to expend the sum of $1,859.40 to protect the residue of plaintiff's property against erosion and damage.

Conclusions of law with respect to Dickinson case

Under the foregoing Findings of Fact the Court decides as a matter of law that:

1. The plaintiff has a cause of action arising under the Fifth Amendment to the Constitution of the United States, jurisdiction is founded on paragraph 20, section 41, Chapter 2, Title 28 of the United States Code, and said cause of action accrued to the plaintiff on September 22, 1938.

2. By the construction and operation of Old Lock and Dam No. 7 and the maintenance of the pool behind it at elevation

554.65 feet for more than 40 years, the defendant acquired
44 the right by eminent domain, adverse possession, or prescription, to maintain the pool stage at that level at plaintiff's property without liability to the plaintiff. But the defendant did not acquire, by such construction and operation of Lock and Dam No. 7, the right to flood intermittently any of plaintiff's lands lying above elevation 554.65 feet above mean sea level.

3. Only one cause of action accrued by reason of the flooding of plaintiff's land in connection with the construction and operation of the Winfield Dam, and plaintiff is entitled to recover compensation for that part of his land lying between elevation 554.65 and elevation 556 feet above mean sea level, despite the fact that it was submerged prior to the date on which he acquired title.

4. The fact that, in connection with the protective work done by plaintiff, a part of the 0.22 acre permanently flooded was later filled and, in effect, reclaimed by plaintiff, does not preclude his right to recover the market value of all of his land permanently flooded by reason of the construction and operation of the Winfield Dam.

5. The plaintiff is entitled to recover:

(a) The sum of $400.00 for the 0.22 acre of land permanently flooded;

(b) The sum of $75.00 for the 0.10 acre of land intermittently flooded;

(c) The sum of $4,245.63 as the reasonable cost, as of September 22, 1938, of protective work which would have been adequate to prevent erosion and damage to the residue of plaintiff's property, if installed prior to the raising of the pool stage in the Kanawha River; and

(d) Interest at the rate of 6% per annum on the entire claim from September 22, 1938, but such claim with interest as aforesaid not to exceed the sum of $10,000.

Conclusions of law with respect to Withrow case

Under the foregoing findings of fact, the Court decides as a matter of law that:

1. The conclusions of law found in paragraphs 1 and 2 with respect to the Dickinson case apply in the same manner with respect to the Withrow case.

2. The plaintiff is entitled to recover:

(a) The sum of $200.00 for the 0.11 acre of land permanently flooded;

(b) The sum of $35.00 for the 0.04 acre of land intermittently flooded;

(c) The sum of $1,859.40 as the reasonable cost, as of
45 September 22, 1938, of protective work which would have

been adequate to prevent erosion and damage to the residue of plaintiff's property, if installed prior to the raising of the pool stage in the Kanawha River;

(d) Interest at the rate of 6% per annum on the entire claim from September 22, 1938, but such claim with interest as aforesaid not to exceed the sum of $3,500.00.

BEN MOORE,
United States District Judge.

CHARLESTON, WEST VIRGINIA, December 14, 1944.
(Filed February 22, 1945.)

46 In United States District Court

[Consolidated]

Reporters' transcript

JUNE 5–7, 1944.

Before Hon. Ben Moore, District Judge.

Appearances: Messrs. Campbell, McClintic & James (E. K. James, Esq.) and Wilson Anderson, Esq., for the plaintiffs; L. E. Given, Esq., United States Attorney, John R. Dyer, Esq., Special Attorney, Department of Justice, and Ralph S. Boyd, Esq., and Walter H. Williams, Esq., Attorneys, Department of Justice, for the defendant.

Charles V. Price, Official Reporter.

Be it remembered, that heretofore, to wit, on Monday the 5th day of June 1944, on the trial of the above-styled consolidated civil actions, the following proceedings were had, to wit:

THE COURT. Are we ready to proceed with the consolidated cases of William M. Dickinson v. United States and F. H. Withrow v. United States? The Court is ready.

MR. JAMES. If your Honor please, I suspect something in the nature of an opening statement indicating the questions of fact and issues of law involved, together with a general outline of the evidence, would be helpful to the Court.

THE COURT. All right.

MR. JAMES. I will make a very short opening statement of that kind.

Plaintiffs' opening statement

By ERNEST K. JAMES, Esq.:

If your Honor please, the case of W. M. Dickinson v. United States involves a claim under the Tucker Act for just compensation for certain lands owned by the plaintiff in South Charleston fronting some 411 feet on Kanawha River which have been permanently flooded in part and temporarily flooded in part in

connection with the construction and operation of the Winfield Navigation Dam in the Kanawha River near Winfield.

The evidence will be that the Winfield Dam was completed, I think on or about August 20, 1937, and that the pool stage at plaintiff's property was raised from a previous elevation of 554.65 feet up to 566 feet above mean sea level, or a distance of about 11.35 feet. That raise in the pool stage involves the flooding along plaintiff Dickinson's property of 0.22 acre. Then in
47 connection with the operation of the Winfield Dam an additional 8 feet along the river bank will be intermittently flooded. That area is about one-tenth acre.

I think the pre-trial order entered in this case states that this new pool stage was reached by gradual stages, the first slight raise taking place, I think, on May 30, 1937, and those gradual stages continuing until September 22, 1938, at which time the final pool stage of 566 was attained. The plaintiff acquired his property on August 16, 1937, which was after the first slight rise in the pool stage. There was something over a foot, I believe, of rise on May 30, 1937, before the plaintiff acquired his title.

The evidence will be that during the raises in the pool stage and after the pool stage had been finally attained plaintiff's property was damaged greatly from erosion due to saturation and softening of the soil, and some five to seven thousand cubic yards of earth and twenty or more trees along the bank were washed into the river. The plaintiff during this time discussed the matter with the U. S. Engineers Corps in an effort to get the Government to take some measures to prevent the damage to his property. He failed in that effort, and finally, with the permission of the Federal Government, proceeded to put in an earth and rock fill along his bank to prevent further erosion. The evidence will be that he placed along the river bank some 16,000 cubic yards of earth and rock, about half earth and half rock, at a cost to him of around $16,000.

Plaintiff's claim, however, consists of a claim for just compensation for the land actually flooded, either permanently or intermittently, plus the reasonable cost of protective measures which, if installed timely and before the damage had been done, would have afforded him adequate protection against the erosion, and damages to the residue of his tract.

Of course his efforts to protect his property after a great deal of the damage was done were much more expensive than if the protective work had been installed before the damage was done. For instance, he had to replace some 7,000 cubic yards of his bank and trees that had washed away. His claim, however, will only consist, as I said, of compensation for the land actually flooded,

plus the reasonable cost of affording him adequate protection on the residue of his tract if installed before the flooding, or at least before the damage was done.

The Withrow case involves substantially the same kind of claim. Withrow's property is located a few hundred yards downstream from the Dickinson property. At one time that was in
48 Spring Hill; since about 1938 it has been a part of the city of South Charleston. Withrow has a frontage of 180 feet on the river. He owns seven lots, which were bought at the same time, together with the river bank in front of the lots, for residential purposes. Before the Winfield Dam was constructed he had two dwellings on this 180 feet, which were used for residential purposes.

There is a subdivision of these lots, the Parkland Addition, and a street was laid out on the plans which, if paved and improved, would extend in part between his lots proper and the river bank. However, Mr. Withrow owned the lands on both sides of that street and also at the dead end of the street, River Drive, which extends up in front of his property. It comes to a dead end just in front of Withrow's property. He bought a small strip of property on the dead end, which means that his lots fronting on this street extend on around and include the river bank and are actually contiguous, although we think that under the law of eminent domain, having been purchased and used for the unitary purpose, they are to be treated as one tract whether contiguous or not. It just happens that it is contiguous. I understand the Government will take issue with us on the question whether or not this river bank is to be treated as a part of the lots on which his dwellings are and which are involved in this suit. As to the Withrow property, I think the evidence will be, and the stipulation order recites, that 0.11 acre is permanently flooded, and that the eight-foot easement area above the new pool which will be flooded intermittently contains 0.04 acre, making a total of 0.15 acre involved in the flowage easement area.

During the raising of the pool on the Withrow property, and since the pool was attained, considerable damage has been done to the residue of that property. Large quantities of the bank have sloughed off and slid into the river. Some twenty substantial shade trees have likewise slid off and gone into the river; and the opinion of experts will be that unless some protective measures are installed there all of about seventy shade trees will go into the river, and a portion of this so-called street. I might say that this street has never been paved, and it is the intention of the property owners that it shall never be paved. It is seeded; it is a part of their nice lawn out there; and the property owners

have access to a street in the rear; so from their standpoint they hope the street will never be paved, and being the owners of all the property around it, it is believed that their wishes will be respected.

In the case of the Withrow property no protective measures have been installed as yet. As in the case of the Dickinson
49 property, Mr. Withrow, when his damages started there, took it up with the U. S. Engineer Corps in an effort to get some protection, but finally failed in that respect, and, therefore, brought this suit. Withrow's claim will consist of just compensation for that which is actually flooded, plus the cost of protective measures which, if installed before the damage was done, would have afforded him adequate protection. Of course, any protective measures put in there now will be considerably more expensive than if installed before the damage was done, but the plaintiffs are advised that they are limited to the cost of protection put in timely so as to prevent the damages complained of.

That is a very hurried outline of these claims. We may have occasion to elaborate on it if we find ourselves in disagreement with the Government in some respects.

Government's opening statement

By RALPH S. BOYD, Esq.:

If the Court please, the Government expects to show that Congress adopted a plan as a unit for the improvement of the Kanawha River, which included four dams running from Gallipolis in the Ohio up to and including London Dam, some miles above Marmet, which, in turn, is some miles above Winfield; that it undertook that project as a unit and prosecuted it as a unit, and spent millions of dollars in doing so; that it completed London Dam a substantial period of time before Winfield; that it completed Marmet before Winfield was complete, but not until after Winfield was well under way; that it completed the Winfield locks, at very substantial cost, before Winfield was commenced; that the up-river dams without Winfield would have been completely useless for the purposes for which they were created; that is, the maintenance of a nine foot channel, because Winfield forms a part without which there would have been only a six-foot channel between the Gallipolis pool and Marmet above it.

We will show that the Winfield Dam was used to impound water as early as October 21, 1936, when it raised the level of the water behind it nearly nine feet; that it could have been used to impound water to a greater height; that it was raised to that level

at that time to make possible navigation below Dam 7 through the old Dam 8 pool to the Winfield Dam while the Government removed old Lock 8, which was situated behind Winfield.

We expect to show that the Government then proceeded to raise the level behind the dam, flooding out locks and dams 7 and 6 in that order. There were several different raises.

The reason for the several raises was to make it possible to take up one dam while maintaining navigation in this pool, and then the water would be raised again to the level of the next up-stream dam and then that dam would be removed.

As was said in the opening statement, the water first reached the properties of these plaintiffs on October 21, 1936; but before that the dam was in actual operation as a dam. We will show that it was known generally that the plans of the Government called for a pool elevation at Winfield of 566 feet above mean sea level, Sandy Hook datum; that that plan was always the plan of the Government from the time the project was undertaken; that there was never any plan or expectation to take land only to a lower level. We will show that the Government was in a position from which it could not retreat, so that it was practically economical and legally required to go forward with the completion of the Winfield Dam after the initial raising of the water which flooded out old Lock 8, because had it not done so navigation between Lock 7 and the Ohio River would have been cut off and the value of all the improvements would have been lost.

We expect to show with respect to the lands of the plaintiff Dickinson that instead of there being 0.22 acre of land permanently flooded, as is alleged in the complaint and as stated in the pretrial order, in fact an extremely small area, so small as to be almost immeasurable, is in fact flooded. It is true that at one time 0.22 acre was under water below elevation 566. That condition is no longer true.

We do not admit, as might be inferred from some of the things that have been said, that the Government will intermittently flood the land to elevation 574. We do admit that some intermittent flooding to an elevation above 566 will be caused by Winfield Dam. We do admit that lands above 566 will be intermittently flooded, perhaps by natural causes or by a combination of natural causes and the Winfield Dam. On that point we would assert that it will be flooded to a considerably higher level, for which we are not liable.

We expect to show that protective measures could have been taken by Withrow and Dickinson which would have prevented the damage for which they are now claiming; that the taking of those protective measures was economically feasible; that if taken in time no damage would have been sustained.

The facts plus the contentions of the plaintiff raise a question which has not been raised before. The plaintiff Dickinson is contending that there was one single taking, and that that
51 taking occurred September 2, 1938, when the pool was raised to its final elevation. A study of the facts and the applicable cases has led to the conclusion that the taking occurred, not when the dam was complete, September 22, 1938, but when the dam was placed in operation as a dam impounding water, capable of being so operated, with the intention of the Government to operate it for the purposes for which it was designed. That occurred in 1936, more than six years before the suits were brought. The limitation in the Tucker Act, as you know, is six years. That question was not raised, but limitation in Tucker Act proceedings goes to the jurisdiction. Government counsel by affirmative action cannot waive it. For that reason we feel obliged to bring it to the attention of the Court, since if the proof should develop as we expect, and your Honor should be of opinion that the taking occurred at that time, then the cases hold, as I believe, that it becomes your duty to dismiss the actions for want of jurisdiction. I say we regret we did not raise the question before, but its existence was only disclosed by a later study of the cases, and we are forced to raise it now.

We expect to show also that the erosion and saturation and other items which have damaged both parcels have occurred, not because of the building of the dam and its maintenance, or at least not solely because of the building of the dam and its maintenance and the maintenance of the pool level at 566, but that surface run-off and other causes, including the acts of the plaintiffs themselves, have contributed to the slips, slides, erosions, breaks, cracks, and other things which are alleged as damage, and for which either they claim or which they claim made necessary the protective measures for which they claim. The Government will contend, of course, that it is not liable for any damage of any kind which has been prevented or which could have been prevented by timely measures, seasonably taken, at the cost of reasonable amounts in view of all the facts and circumstances.

As to plaintiff Withrow's separate tracts, we expect to show that the two tracts are in fact separate and distinct; that while perhaps the riverward tract, which was alleged to be taken in part, was useful in connection with the landward tract, the loss of that does not impair the value of the landward tract, and damage to the landward tract from the taking of the riverward tract cannot be recovered by the plaintiffs.

These points are what we expect to show.

The COURT. Do you have any further statement to make, Mr. James?

52 Mr. JAMES. No, sir.

* * * the plaintiffs, to maintain the issues on their behalf, introduced to the Court the following evidence, to wit:

W. M. DICKINSON one of the plaintiffs, called as a witness for the plaintiffs, having been duly sworn, testified as follows.

Direct examination by Mr. JAMES:

Q. State your name for the record, please, sir.

A. W. M. Dickinson.

Q. You are the W. M. Dickinson that is plaintiff in the case of W. M. Dickinson versus United States?

A. Yes, sir.

Q. Where do you live, Mr. Dickinson?

A. I live on Route 60, South Charleston, Riverside Drive.

Q. How long have you lived in South Charleston?

A. Since 1920.

Q. What is your business?

A. General contractor.

Q. What particular line of work do you engage in as a general contractor?

A. Mostly plant work in the two plants at South Charleston.

Q. Heavy hauling and excavating?

A. That is right, cranes, and shovels.

Q. Are you the owner in fee of the property described in the complaint in this proceeding?

A. Yes, sir.

Mr. BOYD. I object, your Honor, as calling for a conclusion of law.

The COURT. Does the Government have any contention against the ownership?

Mr. BOYD. We traverse it in the answer, your Honor, saying that we are without accurate information.

The COURT. I understand they are going to follow this up by the introduction of the deed. Overruled.

By Mr. JAMES:

Q. When did you acquire this property?

A. In July 1937.

Q. From whom did you acquire it, Mr. Dickinson?

A. From the Spring Hill Development Company.

Q. You could be mistaken as to the exact date on which you acquired title?

A. Yes. The deed would show the exact date.

Mr. JAMES. We offer in evidence a certified copy of the deed from Spring Hill Development Company, a corporation, to William Dickinson, dated August 16, 1937.

53 Mr. Boyd. We have no objection to the introduction of the deed, but we do not wish to be understood as conceding that the introduction of a copy of the deed establishes title for the purposes of this suit.

The Court. I didn't understand.

Mr. Boyd. We have no objection to the introduction of the deed and its acceptance in evidence, but we do not wish to be understood as conceding that by its receipt in evidence title is established.

The Court. All right.

Dickinson Exhibit 1

The deed referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

By Mr. James:

Q. Mr. Dickinson, are there any mortgages, deeds of trust or other liens upon that property?

A. No, sir.

Q. For what purpose did you buy that property?

A. For residential purposes, a truck yard and ready-mixed cement yard.

Q. For what purposes have you used that property since you bought it?

A. For a truck and equipment yard and for residential purposes.

Q. You abandoned any idea of using it for a cement mixing plant?

A. At the present time, yes.

Q. What kind of equipment do you have to store on that property?

A. We store—now and then—we store trucks all the time, and occasionally cranes come in and out, going in and out on the job.

Q. How many trucks do you have?

A. Oh, around twenty some trucks.

Q. How many cranes do you have?

A. Seven.

Q. What would be an approximate valuation of the equipment which you store on your equipment yard there?

A. About $100,000.

Mr. Dyer. Your Honor, we want to object to that. I don't think it has anything to do with the case.

The Court. Well, I am going to reserve my rulings on all these questions of evidence, so your objection may be noted, and ruling reserved.

54 Mr. James. I would like to say that the value of the property involved in this suit will be pertinent and relevant, and

the purposes for which it was bought and for which it is being used have some relation to the question of value.

Mr. DYER. I would like to say, your Honor, that the question is as to the real estate here involved.

By Mr. JAMES.:

Q. What is the area in acres of that property which you bought on August 16, 1937?

A. 3.1 acres.

Q. Mr. Dickinson, have you been furnished a copy of a map or drawing showing the boundaries generally of your property and the area that is permanently flooded as well as the area that will be temporarily flooded?

A. Yes, sir.

Mr. JAMES: We offer in evidence copy of the Government map showing "Kanawha River Flowage Survey, Winfield Pool, Parcel 1038A", as Dickinson Exhibit 2.

DICKINSON EXHIBIT 2

The map referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. How much did you pay for this property?

A. $14,500.

Q. What was the condition of the property generally with reference to the need of filling a grading when you got it?

A. Well, there was quite a bit of grading and filling to bring it up to the present grade—what it is now.

Q. Did you do some grading and filling on that property prior to September 22, 1938?

A. Yes, I did approximately 10,500 yards.

Q. Ten thousand five hundred what?

A. Cubic yards.

Q. Of earth or rock?

A. Earth.

Q. At about what cost to you?

A. About 60 cents.

Q. Sixty cents a cubic yard?

A. Yes, sir.

Q. Did you do any rock grading on that property prior to September 22, 1938?

A. Yes.

Q. About how much?

A. About 500 yards—cubic yards.

55 Q. At about what cost?

A. About $1.35 per cubic yard.

Mr. Boyd. If your Honor please, I object to this line of questioning. It is simply grading on the property, and not grading with respect to the river bank or anything of that sort. There is no issue here about grading that may be 250 feet from the river. We are talking only about the river and flooding. All of these figures have to do with the entire parcel, with which we are not concerned.

Mr. James. If your Honor please, it is relevant, we think, for this reason. We have a question of protective measures to protect the residue. Those protective measures must be economically justified. We need to know the approximate value of this residue as of the date the protective measures were needed, and that is the theory on which I am putting this into the record.

The Court. Ruling reserved.

By Mr. James:

Q. Will you state again the cost of that rock fill?

A. Approximately—Pardon me; I said $1.35; it was about $2.70.

Q. What was that stone or rock fill for?

A. It was for the protection of the trucks, to keep them from miring up—and the cranes which came in there—to keep them from miring up in the soft earth.

Q. And that was used on your equipment yard?

A. That's right, sir.

Q. Did you construct any storm or sanitary sewers on that property prior to September 1938?

A. Yes, I did.

Q. How many?

A. Two.

Q. At about what cost?

A. About $2,500.

Q. Did you install any water and gas lines on that property prior to September 1938?

A. Yes, sir.

Q. How many?

A. Two, a water line and a gas line—an inch.

Q. Have you given the cost of the water and gas line?

A. I haven't yet, no [witness refers to papers].

Mr. Dyer. If your Honor please, for the purpose of the record we make an objection to the admissibility of this testimony, the same as the other.

A. about $825.

56 By Mr. James:

Q. Did you install a gas tank and filling station there prior to September 1938?

A. Yes, sir, I did.
Q. What size?
A. Approximately 4,000 gallons.
Q. And at about what cost?
A. At about $525.
Q. Did you make any other improvements or buildings on that property prior to September 1938?
A. Yes, I built a residence on it.
Q. Was the residence completed by that time?
A. No, sir.
Q. About how nearly complete was it?
A. Well, I would say it was around 60 percent.
Q. Complete?
A. Yes, sir.
Q. What kind of residence is it? Just describe it briefly.
A. Well, up to the present, or up to that present time?
Q. Up to that time.
A. The kind of material used?
Q. Well, just describe the house in a general way.
A. Well, it was black walnut interior on the inside; the interior of the house was black walnut and stone on the inside.
Q. How many rooms?
A. There is seven rooms in the basement.
Q. Seven rooms in the basement?
A. That's right.
Q. How many on the first floor?
A. About thirteen rooms, office and pantry and——
Q. Then it is your home as well as your office?
A. Yes, sir.
Q. Is your office separate and apart from the living part of the house?
A. Well, it is in a way. In a way it is all under the same roof.
Q. But separate rooms?
A. That's right.
Q. Do you have a garage in connection with it?
A. That's right.
Q. Is that garage made out of black walnut also?
A. Yes, sir.
Q. About what was the cost of this house as of September 22, 1938?
A. About approximately $19,000.

Mr. Dyer. If your Honor please, I don't think you can value a house and value the land and add the two together. You value your lots, your property, to the extent that improvements have enhanced that value, not as separate items. For that reason we want to object to the question.

The COURT. As I understand Mr. James's purpose in this, it is to establish the proposition that the land and the improvements on the land were of sufficient value to justify the protection from erosion. Is that the idea?

Mr. JAMES. Yes, sir.

The COURT. And whether or not that theory is concurred in by the Court later, I am not prepared to say at this time, so I am going to let the evidence in, reserving my ruling.

Mr. DYER. I presume he is laying a foundation for fixing the value of the land actually taken.

The COURT. Of course we understand that when it comes to a question of fixing the value of the land taken, the value of the improvements cannot be considered separately, but the value of the whole trace before and after must be taken into consideration; but for Mr. James's present purpose the other would be the proper way to show it, if that is a proper element, so I am letting it in.

By Mr. JAMES:

Q. Just state, Mr. Dickinson, what part or parts of that house are made of black walnut.

A. The whole interior with the exception of the basement, and part of that is black walnut.

Q. Is black walnut pretty expensive?

A. Yes, it is.

Q. That makes a total, I believe, of your investment in that property as of September 22, 1938, of approximately $45,000?

A. Yes, sir.

Q. Mr. Dickinson, when you bought this property in August 1937, what was the condition of the river bank?

A. It was good.

Q. What do you mean by "good"?

A. Well, it had not shown any erosion, or anything like that. It had been standing, it looked, for possibly a good many years; had not been anything—Trees had grown up there, and it didn't show any erosion.

Q. About how many trees were there along the river bank?

A. Approximately seventy-five.

Q. What was the average or range of the diameter of those trees, say two feet from the ground?

A. Oh, possibly eight or nine inches.

58 Q. How large was the largest of the trees?

A. Well, fourteen or sixteen inches or possibly larger.

By the COURT:

Q. And how close down to the edge of the water were trees of that size growing at the time?

A. They wasn't—They wasn't so close to the water. The larger trees were near the top of the bank.

By Mr. JAMES:

Q. Was there a lot of small vegetation near the water?

A. Yes.

Q. Now, Mr. Dickinson, after the stage in the river was raised, and during the times that it was being raised, what happened to your river bank?

A. Well, the river bank saturated with water and caved in—undermined it and it caved in.

Q. Have you any idea how much of your river bank caved into the river, in terms of cubic yards?

A. About from five to seven thousand yards, I would say.

Q. You are in the habit of dealing in cubic yards of earth in your business, are you?

A. Yes, sir.

Q. Did you lose any of your trees?

A. Approximately thirty trees.

Q. You mean the trees slid off into the river?

A. That's right.

Q. Mr. Dickinson, do you have some photographs that were made of your river bank and trees during the time that erosion was taking place?

A. Yes, sir.

Q. Who made those photographs?

A. Mr. Bollinger.

Q. Were you present at the time they were made?

A. Yes, sir.

Q. And can you state whether or not those photographs truly portray and depict conditions there as they were at that time?

A. Yes, sir.

Q. Approximately on what dates were those pictures made?

A. Approximately the first part of '38.

Q. Mr. Dickinson, are those pictures made on the river bank on the front of your property as described in the Government's map furnished you——

A. Yes, sir.

Q. (Continuing.) Which is near the river here?

Yes, sir.

59 Mr. JAMES. The plaintiff offers them as exhibits.

DICKINSON EXHIBITS 3–12

The photographs referred to were admitted in evidence, marked, respectively, as "Dickinson Exhibits 3 to 12" inclusive. The same are hereto attached as a part hereof.

Q. Mr. Dickinson, on the Government's map furnished here, which has been introduced in evidence, there is an indication of a crack up at the top or near the top of the bank, extending towards your house. Will you state whether or not the foundation of your house was affected by cracks or slips in the river bank?

A. Yes, sir.

Q. What part of your house?

A. Well, it went through the garage and came out through the office and throwed the windows out of line—throwed the alignment of the window sills out of line, and lowered the floor to some extent.

Q. Did you notice any effect on the basement walls?

A. Yes, I did.

Q. What was the effect?

A. It cracked the basement wall.

Q. That is this house that you say that——

A. Yes, sir.

Q. Is there any damage to your sewer lines that you testified to having constructed?

A. Yes, sir, it washed the sewer lines—When the bank slipped and broke into the river the sewer lines was broken and the manholes taken into the water.

Q. Did you have to rebuild those sewer lines?

A. Yes, sir.

Q. Mr. Dickinson, do you know what caused the erosion of your river bank in the way that you described?

Mr. BOYD. We object, your Honor.

A. My opinion is it is caused——

The COURT. Wait just a minute. You had better find out first whether he is qualified to give an opinion about that.

Mr. JAMES. I appreciate the fact that this witness is not an expert along that line, but he is the plaintiff, and I thought his observations there might be of some value to the Court.

The COURT. Well, I am inclined to think that this testimony is inadmissible, but I will defer a definite ruling on it at this stage.

60 By Mr. JAMES:

Q. Mr. Dickinson, did you have occasion to observe the river banks of Kanawha River prior to the construction of the Winfield dam and the raising of the pool stage there?

A. Well, not till after I had bought.

Q. Well, with reference to your particular property.

A. Yes, after I had purchased the property.

Q. Was there any erosion there?

A. No, sir.

Q. Did you see that property continuously from the date you purchased it up until this erosion started?

A. Yes, sir.

Q. Were you there every day or so?

A. I was there every day or so on the property.

Q. When did you notice the erosion first started?

A. The first part of the erosion started possibly about the first part of '38.

Q. You had not noticed any prior to the raising of the pool?

A. No, sir.

Q. Mr. Dickinson, did anything happen in connection with your use of your property near the river banks which could have caused that erosion other than the raising of the pool stage?

A. No, sir.

Mr. BOYD. Your Honor, that calls for a conclusion.

The COURT. Ruling reserved.

By Mr. JAMES:

Q. What use did you make of your river bank?

A. Well, I didn't make practically any use of the river bank. At one time I had a mixer, when I poured a manhole in there, that set on the river bank possibly a couple of weeks.

Q. How far from the top of the river bank was that?

A. Approximately a hundred feet.

Q. Did the Government ever contend that that cement mixer sitting there had something to do with your erosion?

A. Yes, sir.

Mr. BOYD. Objection. There is no question here about the contentions of the Government.

The COURT. Overruled.

Mr. BOYD. Nor is Mr. Dickinson in position to state the contentions of the Government.

The COURT. Overruled.

By Mr. JAMES:

Q. You have had a good deal of experience with cement mixers, have you?

61 A. Yes, some.

Q. Have you had occasion to have cement mixers sit along river banks as close to the top of the bank as this one sat?

A. Yes, sir.

Q. Did you ever know of a cement mixer sitting that close to the river causing any erosion on the river bank?

A. No, sir.

Q. Mr. Dickinson, when your river bank started eroding, did you take the matter up with the U. S. Engineers' Corps?

A. Yes, sir.

Q. For what purpose?

A. To get them to fix it or to appropriate something to fix it with.

Q. Did you correspond with them?

A. Yes, sir.

Q. Receive letters from them?

A. Yes, sir.

Q. And wrote letters in your own behalf?

A. Yes, sir.

Q. Mr. Dickinson, I hand you what purports to be a carbon copy of a letter written by you on April 4, 1938, addressed to Major C. C. Frech, Corps of Engineers, U. S. Engineers Office, Huntington, West Virginia. I ask you if that is a copy of your letter that you wrote to Major Frech.

A. Yes, sir.

Q. Was the original of this letter enclosed in an envelope, properly addressed and sealed, containing the required amount of postage, and placed in the United States Mail?

A. Yes, sir.

Mr. JAMES. We offer that.

DICKINSON EXHIBIT 13

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. I hand you another letter which bears date April 14, 1938, addressed to you and signed by Major Frech, Corps of Engineers, and purporting to be the original letter replying to your letter of April 4. I will ask you if you received that letter.

A. Yes, sir.

Mr. JAMES. We offer that.

DICKINSON EXHIBIT 14

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you another letter by Major F. F. Frech, addressed to you, under date of July 25, 1938,
62 purporting to discuss your situation at South Charleston. I will ask you if you received that letter from Major Frech.

A. Yes, sir.

Mr. JAMES. We offer that.

DICKINSON EXHIBIT 15

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you what purports to be a carbon copy of a letter by you to Major F. F. Frech, of the U. S. Engineers' Corps at Huntington, dated July 5, 1938, and I will ask you if you wrote that letter.

A. Yes, sir.

Q. State whether or not the original of this letter was sealed in an envelope properly addressed to Major Frech with the required amount of postage on the envelope and placed in the United States Mail.

A. Yes, sir.

Mr. JAMES. We offer that.

DICKINSON EXHIBIT 16

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you another letter addressed to you under date of July 8, 1938, by S. D. Sturgis, Jr., Captain, Corps of Engineers, Assistant, Huntington, West Virginia. I will ask you if you received that letter from Captain Sturgis.

A. Yes, sir.

Mr. JAMES. We offer that in evidence.

DICKINSON EXHIBIT 17

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you what purports to be a carbon copy of a letter written by you to the United States Engineers office at Huntington on July 16, 1938. I will ask you if you wrote that.

A. Yes, sir.

Q. Was the original of this letter mailed to the Engineer Corps at Huntington?

A. Yes, sir.

Q. State whether or not the original letter was sealed in an envelope, properly addressed, with the required amount of postage on it, and placed in the United States Mail.

A. It was; yes, sir.

Mr. JAMES. We offer it in evidence.

63

DICKINSON EXHIBIT 18

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you what purports to be an original letter written by S. D. Sturgis, Captain, Corps of Engineers,

Assistant, on July 22, 1938, and addressed to W. M. Dickinson at your residence address. Did you receive that letter?

A. Yes, sir.

Mr. JAMES. We offer it in evidence.

DICKINSON EXHIBIT 19

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you what purports to be a carbon copy of letter written by you on July 27, 1938, to the U. S. Engineers Corps at Huntington, West Virginia, relative to your bank protection at South Charleston, and I will ask you if you wrote that letter.

A. Yes, sir.

Q. State whether or not the original of that letter was sealed in an envelope addressed to the U. S. Engineer Corps at Huntington, with the required amount of postage on it, and placed in the United States Mail.

A. Yes, sir.

Mr. JAMES. We offer it in evidence.

DICKINSON EXHIBIT 20

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Dickinson, I hand you what purports to be an original letter bearing date August 1, 1938, addressed to you at South Charleston, and signed by S. D. Sturgis, Jr., Captain, Corps of Engineers, Assistant, at the Huntington, West Virginia, office. I will ask you if you received that letter in the mail.

A. Yes, sir.

Mr. JAMES. We offer it in evidence.

DICKINSON EXHIBIT 21

The letter referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

The COURT. Mr. James, you might state the purport of those letters.

Mr. JAMES. There are several purposes of those letters,
64 among them as to what use is to be made of that marginal area above the pool stage, the position the Government then took with reference to the damages to the residue due to erosion, and I think all of the letters are material to the issues in this case.

Mr. Boyd. We object to them because they are letters dealing with and negotiating a compromise and settlement of an existing dispute, and therefore cannot be used in this action. We object to them also because the position taken by the district engineer or whomsoever signed them is not binding upon the United States in this action.

The Court. Ruling will be reserved.

By Mr. James:

Q. Mr. Dickinson, did you later secure a permit to put in some protective work on your property to prevent further erosion?

A. Yes, sir.

Q. And did you, following that permit, proceed to do some protective work?

A. Pardon me?

Q. Following the receipt of a permit, did you proceed to make or install some protective measures along the front of your property?

A. Yes, sir.

Q. Will you tell us what those measures were?

A. Making a fill with stone and earth fill there.

Q. This permit was from the U. S. Engineer Office?

A. Yes, sir.

Q. Will you state again what that protective work was?

A. Stone and earth fill.

Q. Did it extend across your entire river front?

A. Yes, sir.

Q. And about how much earth and stone fill did you put in there?

A. About 8,000 cubic yards of stone and about 8,000 cubic yards of earth.

Q. Can you state about what the cost of that earth per cubic yard was?

A. Approximately 60 cents.

Mr. Boyd. We object, your Honor. We are not concerned with the cost in any case. He can only recover the value before improvements. Of course, we are also disputing the admissibility of any evidence as to protective measures.

The Court. I don't believe I get the connection as to what that work was for. What did the witness say it was for?

65 Mr. James. The purpose of the evidence?

The Court. No, what was the work that he said was done there, and what was it for?

Mr. James. Earth and rock fill to prevent further erosion of his property.

The Court. Well, I will reserve ruling on the objection.

By Mr. JAMES:

Q. About how many cubic yards of rock fill did you put in there, Mr. Dickinson?

A. Approximately 8,000.

Q. What was the approximate cost of the rock fill per cubic yard?

A. Quarry-run it is about $1.35.

Q. Did you do any other work along the river front there in the nature of protection or in the nature of beautification?

A. Yes, sir.

Q. What was it?

A. We built some stone walls and lined our bank up—pardon me, brick walls—and lined our bank up for beautification, and also built wells around our trees.

Q. Did you have any photographs made of the river bank and the protective work as you progressed with that work?

A. Yes, sir.

Q. Who made those photographs?

A. Made by Joe Dickinson.

Q. Were you present when those photographs were made?

A. Yes, sir.

Q. Can you state that those photographs correctly portray the subject matter of the picture?

A. Yes, sir.

Q. The conditions as they existed at that time?

A. Yes, sir.

Q. About when were these pictures made?

A. They was made in '38. It was along the first part of '38, or middle, possibly, of '38.

Mr. JAMES. Your Honor, we want to offer these pictures, and the purpose is simply to bear out his testimony as to the extent of the protective work which he put in there at his own expense. While it is true his claim against the Government is not predicated upon the amount of protective work he did but rather upon what would have been adequate protection if timely put in, nevertheless we think that the fact that a man proceeds to put in the protective work at greater expense than it could have been put
66 in earlier supports his testimony to the effect that protection is justified; otherwise a man would not spend his money for that purpose.

The COURT. The Government has not objected yet. I presume there is objection.

Mr. BOYD. We object on the ground that the Government is not liable for protective measure, and hence they are inadmissible.

The COURT. What do these pictures purport to show, Mr. James?

Mr. JAMES. They purport to show the amount of rock, the nature of the rock and earth fills, the amount of protective work around the manholes and the sewer lines.

Mr. BOYD. If they are offered to show the nature of the work rather than the fact that it was done, then the Government objects on the ground that there has been no showing that this kind of work is best adapted to the protection needed or that Mr. Dickinson is qualified to make a decision.

The COURT. I don't see any indication on the picture as to where this is located with reference to the water's edge or the river bank even.

Mr. JAMES. He has testified that they are made on the river bank and during the progress of his protective work.

The COURT. I will permit them to come in, and reserve ruling.

DICKINSON EXHIBITS 22–28

The photographs referred to were admitted in evidence, marked, respectively, as above indicated. The same are hereto attached as a part hereof.

The COURT. Mr. James, if you are getting ready to open up a new line, it is nearly twelve o'clock, and I intend to adjourn at twelve, so——

Mr. JAMES. I suspect now is a good time to suspend.

The COURT. All right.

(Whereupon, at 12 o'clock noon, a recess was taken until 2 o'clock p. m.)

AFTER RECESS—2 P. M.

By Mr. JAMES:

Q. You are the same Mr. Dickinson that testified before lunch in this proceeding?

A. Yes, sir.

Q. Mr. Dickinson, I believe you testified that in connection with the protective work which you did on the front of your property, you piled some 8,000 yards of earth——

A. Yes, sir.

Q. (Continuing.) on the eroded part of your property, and some 8,000 yards of stone, quarry-run?

A. Yes, sir.

67 Q. What did you say was the cost price of that stone per cubic yard?

A. $1.35/quarry-run.

Q. Totaling the cost of your earth and stone together, what does it make?

A. Totaling the cost of your earth and stone together would be approximately 16,000 yards—$16,000.

Q. Will you explain just what you mean by quarry-run stone?

A. Quarry-run stone is what would be shot down in a quarry and picked up by a clam-shell or shovel or piece of equipment and loaded as it comes out of the quarry. Anything that is small enough to be loaded by derrick or shovel, or anything small enough to be picked up with a shovel, is acceptable in quarry-run.

Q. Mr. Dickinson, if the protective work on your property had been done before the flooding and the erosion along the river bank, would it have cost less or more than when you did it?

A. It would have cost less.

Mr. BOYD. We object.

The COURT. Wait just a minute. There is an objection, and ruling reserved.

By Mr. JAMES:

Q. Have you ascertained through competent engineers and contractors what would have been the cost of giving you adequate protection there as of September 1938?

A. Yes.

Mr. BOYD. Objection.

The COURT. Mr. James, I think that is clearly inadmissible from this witness.

Mr. JAMES. I understand that, your Honor. We expect to have those very individuals here to testify following him.

The COURT. Then you are not going ahead with his opinion about it based on hearsay?

Mr. JAMES. That is right. I just want to show that he has had that estimate made and the amount of the estimate. It will be proved by the people who made the estimate, and they will testify in detail.

Q. What is the amount that you have been advised it would have cost—or what is the amount of the cost—of that adequate protection as of September 1938?

A. About $7,000.

68 Q. Now, Mr. Dickinson, do you recall how much of your river front land was permanently flooded, as shown by the Government's map?

A. 0.22 acre.

Mr. BOYD. Objection, if your Honor please. The map speaks for itself and the map is in evidence. If the witness is to testify as to the fact, it should not be from what the Government's map shows, but what he knows of his own knowledge.

The COURT. Well, I can't see that any harm will be done by letting him state what is shown by the map.

By Mr. JAMES:

Q. Mr. Dickinson, do you know what was the fair market value of that 0.22 acre of your river bank that has been permanently flooded?

A. Well, I would say it would be worth——

Mr. BOYD. Objection, your Honor, to the question whether he knows the value. If he is going to express an opinion as to the value we object on the ground he has not shown he is qualified.

The COURT. Overruled.

A. In general land around there is worth about $5,000 an acre. I would say that would be worth about half, which would be $2,500 an acre.

By Mr. JAMES:

Q. An acre?

A. Yes, sir.

Q. And 0.22 acre would give you what figure?

A. $550.

Q. According to the Government's map, the 8 feet of easement above which would be flooded intermittently contains .10 acre.

Mr. BOYD. Objection, if your Honor please. The map doesn't show any 8 foot easement, nor is the Government taking any 8 foot easement. There is no evidence in the case to show that. The map does show contour 574.

Mr. JAMES. And shows the area of that additional 8 feet.

Mr. BOYD. That is correct, but that is quite different from an easement.

The COURT. Well, if that is just a matter of the terms used the Court will of course understand what it means. Overruled.

By Mr. JAMES:

Q. What value do you put on the flowage easement for intermittent flooding on one-tenth acre of land along your river bank?

69 Mr. BOYD. Objection, your Honor. The question does not fix the time of the taking; the question does not fix the amount of additional flooding which the dam has subjected the land to; the witness is not qualified—the same objection as to the other area; and, fourthly, that the question calls for the value to him rather than the value on the open market to a willing purchaser and a willing buyer.

Mr. JAMES. If your Honor please, I take it that the same rule obtains in a case of this kind on opinion evidence as to the value of land as in a case of a condemnation proceeding.

The COURT. I think the objection, as far as it relates to this witness giving his opinion, is not well taken, so I overruled the objection a while ago; but there is still another objection to this question, and that is as to the character of the intermittent overflow and the percentage of total value that it represents.

Mr. JAMES. Withdraw that question, will you, Mr. Reporter.

Q. Mr. Dickinson, did the Government make any representations to you with reference to flooding intermittently an area of 8 feet above the new pool of 566?

A. Yes, they did.

Mr. BOYD. I object, your Honor, unless the question fixes the time the representations were made and the persons who made the representations.

The COURT. I don't know that the time is material, but the persons certainly would be. What is the materiality of it?

Mr. BOYD. To fix the time so that we can identify the occasion upon which it was made, and, if we are so advised, contradict. Otherwise it is an unplaced conversation which we have no opportunity to contradict.

Mr. JAMES. If the gentleman will give me an opportunity, I will do that very thing.

The COURT. All right; go ahead.

By Mr. JAMES:

Q. I believe your answer was in the affirmative to the first question, that the Government has made representations to you with reference to the flooding intermittently?

A. Yes.

Q. In connection with what event did the Government's representatives make those representations to you?

A. Well, that the pool level would be 566, and that your intermittent flooding there would be 574.

Q. Well, on what occasion did you have a conversation with the Government representatives in regard to this temporarily flooded area?

70 A. It was an agent that they sent out on the jobs to contact the different ones on the job, I suppose.

Q. Did they endeavor to purchase from you by deed——

Mr. WILLIAMS. Objection, your Honor.

Mr. JAMES. Q. (Continuing.) This flowage easement that you are talking about?

A. Yes, they did.

Mr. WILLIAMS. Objection. I believe before this line of questioning goes forward he should identify who "they" are.

The COURT. As I understand, he is coming to that. Who was the man you were talking to?

A. Well, there were several. I couldn't call them by name. There was quite a few; we were contacted quite a few times.

By Mr. JAMES:

Q. Were these the representatives that came to you to buy this flowage easement that told you it would be temporarily flooded?

A. Yes, sir.

Q. Do you recall their names?

A. No, I did not. They came quite a few times—they have been around quite a few times.

Q. Did the Government engineers, in their letters to you, indicate that that area was desired, and the purposes for which it was desired?

A. For that reason of your lowering of the dam there, the difference from your permanent flooding——

Mr. JAMES. Wait just a minute. Mr. Reporter, read him my question.

(The question was read.)

A. Yes.

Mr. JAMES. That is true. It is in those letters which are in evidence.

The COURT. All right. Is there any statement in the letters as to how often the intermittent flooding will occur?

Mr. JAMES. No, sir, and we don't know. Nobody but the Government knows that, and we hope they will enlighten us on that. We do know that it will be intermittently flooded; they said it would be; we don't know how often.

Q. Mr. Dickinson, what value do you put upon that flowage easement for intermittent flooding, covering an area of 0.10 acre?

Mr. BOYD. If your Honor please, the question is not its present value. The question is what its value was when it was taken.

71 The question calls for an answer as of today, and calls for an answer as to the value the witness puts on it, the value to himself and not the value on the market.

Mr. JAMES. Let me amend that by saying as of September 22, 1938.

The COURT. I believe you would have to amend it also to ask for the market value, in his opinion, rather than the value to him. I believe he was about to give the value to him.

Mr. JAMES. All right, sir. I will reframe the question, then.

Q. Mr. Dickinson, are you in a position to state what, in your opinion, was the fair market value of the 0.10 acre to be flooded temporarily or intermittently, as of September 22, 1938? Now, it is not to be flooded as of that date, but your opinion as to the fair market value is to be as of that date.

The COURT. And the value is to be, not the value of the 0.10 acre, but the value of the flowage easement intermittently to be exercised on the 0.10 acre.

Mr. JAMES. That's right.

Do you understand the question?

Mr. BOYD. Objection to that, your Honor, because the question does not call for even an approximation of the number of times it is to be overflowed. Until that is established no value can be placed on the easement with which the question deals.

The COURT. That is a matter peculiarly within the knowledge of the Government, it seems to me, but we know that there is to be intermittent flooding. That is the basis of the question, I suppose. I will permit the witness to answer, and then appraise his answer in the light of all the facts developed.

Mr. BOYD. I would like to point out, of course, that it is impossible to place a value on an unknown quantity, and until it is shown that it will be overflowed once, twice or a dozen times a year, it is impossible to say whether the damage to be done is once, twice or a dozen times.

The COURT. You can cross-examine him on that, and if the evidence shows it is to be flooded more or less than he is using for his basis, the Court can estimate it accordingly.

Mr. JAMES. Will you answer the question now, Mr. Dickinson?

A. Yes, sir.

Q. What, in your opinion, was the fair market value as of September 22, 1938, of a flowage easement to flood intermittently the 0.10 acre of the area lying above contour 566 above mean sea level and below elevation 574 above mean sea level?

A. Well, that being flooded only occasionally, it would
72 be worth about one-half of the value of the 0.22, which would be $1,250.

Q. At $1,250 per acre, then, 0.10 acre would give you how much?

A. $125.

Q. That is the value you place on the easement for intermittent flooding?

A. I think that would be a fair value.

Q. Mr. Dickinson, before noon you testified that you acquired this property on August 16, 1937, by deed of that date.

A. Yes, sir.

Q. Did you later get a corrected deed from the same grantor?

A. Yes.

Q. Do you recall the occasion of the necessity for your getting a corrected deed?

A. It was to correct some error.

Q. Well, it will be a question of law, so I think we can withdraw that question. I hand you a deed of conveyance entitled, "Corrected deed," dated June 24, 1943, by the Spring Hill Development Company to William Dickinson. I will ask you if that is the corrected deed to which you refer?

A. Yes.

Mr. JAMES. We offer this as Dickinson Exhibit 29, and I might state on the record that the only purpose for the corrected deed, as will appear from the deed itself, was in the matter of the recordation. The corporate acknowledgement to the first deed was considered questionable, and the second deed was intended just to correct that possible defect.

DICKINSON EXHIBIT 29

The document referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Cross-Examination by Mr. BOYD:

Q. Mr. Dickinson, when you bought the land in question here, you knew about the plans for the Winfield Dam and Winfield Pool, did you not?

A. Yes, sir.

Q. You were aware that those plans called for the elevation of the water to a final level of 566 feet above mean sea level?

A. No; I didn't know what the exact elevation was there at the time I bought it.

Q. My question was whether you knew that the plans called for elevation to 566 when the pool was complete?

A. Yes; I believe I did.

73 Q. You knew that the water had already been raised once by the dam?

A. Slightly.

Q. You knew that it had been raised at your property?

A. Well, it wasn't hardly noticeable there. If you didn't know whether it was high or low water you would hardly notice it there.

Q. Did you know how often the water in the old pool, that is, the dam 7 pool, rose to 574 or greater heights before Winfield Dam was built?

A. No, I don't.

Q. Do you know the bank angle at which the land was resting when you bought it?

A. Oh, I think it was—I don't know the exact, but it possibly was 1½ to 1 possibly.

Q. Do you know what a safe angle of repose for soil of the content of that river bank is?

A. Most river banks is around 1½ to 1, I think.

Q. For soil of the type that you bought, do you know what the angle of repose is?

A. Well, 1½ to 1 is mostly on all river banks, and some 1 to 1.

Q. That varies according to soil content and structure, does it not?

A. Well, the soil practically is the same on the river banks of the same river.

Q. Will you tell the Court the method you followed in making this fill?

A. The method I followed in making the fill?

Q. Yes.

A. Well, we first hauled and dumped over the river till we could get enough solid in there to get—after this had gone out and left the soil down in there, we dumped enough solid to put a bulldozer there. We used a bulldozer to pack it and keep it on grade as we raised the fill.

Q. That is, you hauled earth and rock and other materials to the bank's edge and dumped it over the edge?

A. Yes, we placed it in place with a bulldozer.

Q. A large part, or some part of that material was secured on the land itself, was it not?

A. No, sir.

Q. You didn't bulldoze a couple of elevations on the upland over the bank?

A. No, sir. We bulldozed the other. We cut it off and took it the other way.

74 Q. Some of the filling that you made was for the purpose of providing a solid bottom for your trucks and truck parking area, was it not?

A. Yes; up further in the lot it was.

Q. Was that amount included in the amounts that you stated about filling there?

A. Not on the river. That was including in the grading up to the top of the——

Q. But it was not included——

A. Not included in the river.

Q. You stated the cost of the fill to be 60 cents a yard for earth and $1.35 a yard for quarry-run rock?

A. That's right.

Q. Does that mean that you paid 60 cents a yard?

A. No, that is just the cost; that hasn't any taxes or any profit or anything allowed.

Q. What elements make up those costs that you quoted?

A. Such as furnishing stone and shooting and hauling and loading and hauling.

Q. If you didn't pay those costs, is that your estimate of what it would have been worth to you if you had sold it?

A. Well, there would have been a profit added. We made this as a cost. You would have a profit and taxes and what-not added to it.

Q. You secured the stone from your own property?

A. That's right.

Q. Other property?

A. Other property other than that.

Q. This $1.35 represents the price at which you would have sold it?

A. No, that was cost; that is the cost price.

Q. That is the amount which it cost you to produce it?

A. We didn't add any profit to that, because we was anxious to get the Government to do something about fixing it, and we wasn't talking about profits or anything.

Q. But by cost you mean the amount it cost you to blast the rock, haul it to the site and dump it in place?

A. That's right.

Q. On the sewers which you testified you installed, you installed those yourself?

A. Yes, sir.

Q. Have you ever installed other sewers elsewhere?

A. Pardon me?

Q. Have you ever installed other sewers elsewhere?

A. Oh, yes, we have installed other sewers.

75 Q. Is that your regular line of business?

A. No, sir.

Q. How often have you done it?

A. Well, we have done it quite often in different plants.

Q. Would it be once, twice, fifty, or a hundred times?

A. Well, it would be quite a few times.

Q. Can you give an approximate number?

A. Oh, I would say four or five times, anyhow.

Q. Was that in similar lands?

A. Yes, sir.

Q. Similar sewers?

A. Yes, sir.

Q. Eight-inch sewers for sanitary purposes?

A. Yes, sir.

Q. Did they empty over a river bank as these sewers did?

A. Some of them did, yes, sir.

Q. How many did?

A. Oh, I don't know. There was two or three sites.

Q. When these sewers were installed, didn't they discharge onto the river bank itself?

A. No, sir. You mean the sewers that I installed for myself personally?

Q. That's right.

A. No, sir.

Q. They did not?

A. No, sir.

Q. Were they submerged?

A. Yes, sir.

Q. The house which you built, that house rests, and did rest when you built it, over the top of the bank, is that correct?

A. No, about even with the top of the bank.

Q. Isn't it designed so that only by being over the top of the bank the basement is exposed?

A. There is a terrace in there. They came off the terrace.

Q. Which cut the bank down?

A. Which cut the bank down, did you say?

Q. Yes.

A. Well, we cut down and cut the bank out level.

Q. You cut the bank?

A. Yes, sir.

Q. You applied to the district engineer, did you not, for permission to put in the sewers?

A. Yes, sir.

Q. Do you recall whether, in your application for that
76 permit, you showed on a plat attached to it that the top of the bank ran through the corner of your house?

A. Ran through the corner of the house?

Q. Yes.

A. No.

Q. No you don't recall or no the plat didn't show it?

A. That the surface ran through the corner of the house?

Q. The question is whether you recall the plat which you annexed to the permit to put in sewers, and whether you recall that the plat annexed to that permit showed that the top of the bank ran through the corner of your house. Do you recall that?

A. I don't know that I follow you on that.

Q. You did file an application for a permit to put in the sewer?

A. That's right.

Q. Did you attach a plat to that permit?

A. That's right.

Q. Do you remember whether that plat showed the top of the bank running through a corner of your house?

A. I don't think the corner of the bank—there might be a terrace up there that was even with the top of the bank in order to land properly on the terrace below.

Q. Do you remember, though, whether the plat showed the top of the bank running through a corner of the house?

A. You mean—I don't know whether I follow you on that or not.

Mr. JAMES. I don't know what his question is either.

Mr. BOYD. You filed an application for permission to make a fill?

A. That's right.

Q. And to that application you attached a plat, did you not, showing the location of the fill and location of the house and various other things?

A. Yes.

Q. Do you recall whether that plat showed the top of the bank running through the corner of your house [handing witness paper]?

A. That would be a terrace running out there. It don't go through the corner of the house, because the house is above——

Q. One moment, I show you a copy of the document and ask you whether that is an accurate copy of the plat which you filed with your application for a permit to construct fill?

A. Well, not having it compared here, I would say yes, that that is.

77 Q. Does that plat show a line marked "top of bank" running through the house?

A. I don't think I follow you on this thing, running through the house.

Q. There is the house [indicating]; here is the line.

A. You mean that this grade level right here and this grade level there beyond, do you call that running through the house, or what do you call that? If I follow you right I will answer your question.

Q. I am asking you about this point which shows a line marked "top of bank," shows the house, and shows the line marked "top of bank" intersecting the house. Is that correct?

A. Well, this top of the bank here—you are calling that the top of the bank?

Q. I am talking about this plat.

A. This is your side view here. Are you calling that the top of the bank?

Q. I am talking about what you put on this plat which you marked "top of bank." What does that mean?

A. Well, this would be the top of the bank here, if that is the top of the bank.

Q. It is your plat.

A. Well, if that is what you are wanting me to say, here is the top of the bank right here.

Q. On this plat which you have in your hand, what does this line that you have marked "top of bank" represent?

A. That represents this line that is the top of the bank.

Q. You made the plat. Can't you tell us what it represents?

A. Well, it represents top of the bank, that is, that line right there.

Q. And does it, as shown on your plat, intersect the house and show that the house is built over the top of the bank?

A. It would be built on this plat right down here, your basement; otherwise, if you go up in this field and dig a basement down in there it would reach to that depth, it would reach down in there whether it was over the bank or where it was at. That would be your depth your basement will reach, you see. We will say that was 600—that is not correct—say that was 600, and you dig a ten-foot basement down there, that would be five——

Q. Let's not speculate. You have a plat before you which you drew which shows a line marked "top of bank"——

A. Well, if your elevation came down here——

Q. I am not talking about "if elevation." Will you please answer my question? Will you please state what "top of bank" means——

78 A. That means the top of the bank, the whole elevation.

Q. Does it show the house as built in part on the riverward side of the top of the bank?

A. Yes, it does, because this is open to this side of the bank, and it does.

Q. It does show that the house was built——

A. It was built so that your excavation came down here, and it is not built over the bank, but your excavation opens to the open part of the bank, because your steps sets off right out this way and comes right up.

Q. We are talking about what the plat shows, Mr. Dickinson.

A. Your basement is under the top of the bank; the basement is not built on top of the bank.

Q. So part of the house is built riverward from the top of the bank?

A. Any house that is built in that same area——

Q. We are talking about your house.

A. It was built under the top of the bank, otherwise it would not be a basement.

Q. Now, Mr. Dickinson, in placing a house on the top of the bank and over part of the bank, is that not likely to cause slips and slides?

A. What do you call over?

Q. On the riverward side of the top of the bank.

A. There is one end of the house that would not have been over the bank.

Q. But there is an end of the house over the top of the bank. That weighs a substantial amount, does it not?

A. We cut the bank off—sloped the bank back, which might at this present show that it is over the top of the bank, because we cut the bank back, and your slope might show the bank, but it wasn't actually cut—we cut it out from the basement on out to it, so your terrace would show it out.

Q. So a part of the house does rest over riverward from the top——

A. It would rest on that second terarce; it would not rest over the river bank; it would rest on the second terrace, which is solid land; there is none of it filled land; it is virgin land in there; it never was disturbed.

Q. Do you know the angle of the bank where you built it?

A. It was probably 1½ to 1. I don't know the exact angle.

Q. Do you know the content of the soil at that point?

A. Oh, it is sand and loam and clay.

Q. Do you know the angle of stability of soil of that content?

A. Well, most river banks are 1½ to 1.

79 Q. Not most river banks—soil of that content.

A. Well, your knowledge of the river banks is that most of them rest on that, but knowledge proves that that is proper—it will almost slope to that if it is let alone.

Q. Do you know the weight that soil at that angle will bear?

A. It is owing to how much clay is in it.

Q. Do you know the weight that soil of that content of your land will bear at that angle?

A. Well, some of that land will grow around——

Q. At the point where the house is.

A. Approximately 2,500.

Q. Approximately 2,500 what?

A. Pounds per square foot.

Q. Do you know the weight that your footings bear there?

A. No, I do not. It is very light.

Q. You constructed wells around a number of trees there, did you not—of bricks?

A. That's right.

Q. Don't those wells catch and hold rain water?

A. No, sir, they do not.

Q. They do not?

A. No, sir.

Q. Do you have any down-spouts from the drains on the roof of your house?

A. Yes, sir.

Q. Where do those down-spouts run?

A. Go to the sewer.

Q. Is that true all around the house?

A. Well, some of the down-spouts possibly are down right now, but there is a sewer entrance right there that will take care of it.

Q. Do you know how many of your gutters are drained by down-spouts into the sewer—what length?

A. No, I don't believe I do. I would have to check them.

Q. Are there any of your gutters which simply open onto the open ground?

A. Yes, there are, here recently, because we wasn't able to buy—we got some of them destroyed and unable to buy them back.

Q. Where does that surface water from the gutters drain?

A. Into the sewer.

Q. Does any of it drain over the top of the bank?

A. No, sir.

Q. Did it ever?

A. No, sir, not to amount to anything.

80 Q. Are there any cuts, slips, slides, or other evidence of drainage from surface water on the edge of your bank?

A. Oh, there might be one little cut, but it is not anything great.

Q. You testified on direct examination that you first noticed evidence of erosion about the first part of 1938. Is that correct?

A. Yes, that is—when any erosion that amounted to anything occurred was about the first of 1937 or last of 1938.

Q. Isn't it true that in October 1937 you had an extremely high flood caused by natural causes in the Kanawha?

A. I don't remember the dates of the floods, I don't think. We only had one. I know it was in July.

Q. Do you recall an extremely high flood shortly after you bought the land?

A. Yes, I believe I do.

Q. That would be in the latter part of 1937?

A. Yes, sir; I think we had some high water at that time.

Q. You don't know whether this evidence of erosion which you noticed was caused by that flood or caused by other causes, do you?

A. Well, it hadn't never occurred before that. The trees there had been there quite a number of years; there hadn't never anything happened there before, that is, to pay any notice to.

Q. Do you know when the level of the river had last previously reached that elevation?

A. Which elevation?

Q. Of that flood in the fall of 1937.

A. No, I don't. I have no record of it.

Q. Do you know the cause of the erosion which you say you noticed in the fall of 1937 or the first part of 1938?

A. Well, to my opinion——

Q. I am asking you, do you know?

A. Well, what I know would be my opinion, would it not? To my opinion——

Q. I don't want an opinion. If you don't know, please say so.

A. Well, the saturating of the bank with water when you bring the river up there——

Q. You don't know what caused it?

A. Well, yes, that would cause it, saturated the bank where it wasn't accustomed to water.

Q. We are talking about the particular erosion that you noticed in the spring of 1938 or the fall of 1937.

A. After you looked down there and saw the river had cut away your river bank, it had saturated the bank and had
81 cut it away, you would know that that was the water had done that—that was the river.

Q. At what elevation did you notice this erosion?

A. What elevation?

Q. Was it at pool level, or above?

A. It is above pool level; I couldn't see below the pool level, because the river was there.

Q. How far above, approximately?

A. Well, there is some of that run up to about 595, I imagine. No, maybe not hardly that high. I would say 590. Some of it come up to 590—approximately that.

Q. The erosion came about 590?

A. Approximately.

Q. Could that erosion have been caused by the flood in 1937?

A. Well, no, because the bank had dried all out—had all dried out and everything, and there was no sign of it.

Q. Doesn't the drying of a bank after it has been wet tend to cause it to slip?

A. Well, getting it wet is first what causes it to slip.

Q. Followed by drying?

A. No, your drying usually stiffens a bank.

Q. On this fill that you put in, can you allocate the amount of the fill that you put in for protection and the amount of the fill that you put in for beautification and the amount of the fill you put in for convenient draining?

A. Well, we had an engineer and contractor to get those costs of what it would cost to do it before that.

Q. The fact is that all of the material that you put in there was not for protection, was it?

A. No, sir, all the fill wasn't for protection.

Q. So all of the fill that you testified about this morning was not for protection?

A. No, sir, not all of it.

Q. When you bought this property, did you take into consideration in reaching a price the possibility or plan of the Government to raise the water to 566?

A. No, I didn't, because the river was back down on its—had a little beach down there.

Q. But even though you knew the plan to raise——

A. No, I didn't know the plans, but I knew the dam was being built down at Winfield.

Q. Didn't you testify earlier, on cross-examination, that you knew the plan?

A. Pardon me?

82 Q. Didn't you testify earlier on cross-examination in response to questions from me that you knew——

A. I never saw the plans from Winfield Dam.

Q. I didn't ask you whether you saw the plans. I asked you whether you knew the plans.

A. No, I knew the elevation which they called for, but I didn't know the plans of the dam.

Q. You testified that you spent $7,000 on this fill, is that correct?

A. $7,000? I spent about $16,000.

Q. I beg your pardon. You testified that $7,000 would be the necessary cost?

A. That's right, about $7,000—under our engineers and contractors that would have been the cost of this before——

Q. Was that figure limited to protection?

A. I don't know whether I follow you or not.

Q. Was it limited to protection as distinguished from beautification?

A. Yes.

Q. It had nothing to do with any grading for convenien

A. There is no cost charged to you for beautification.

Q. Have you ever dealt in real property?

A. Pardon me.

Q. Have you ever dealt regularly as a business matter in real property? Have you bought and sold real property?

A. No.

Q. Are you acquainted with the values of real property in the city of South Charleston?

A. I know what they sell for around in the neighborhood, part of it.

Q. What do you mean, you know what they sell for?

A. I know what the people claim they paid for something—I believe Dr. Dunn had some property over there that bordered on the creek he told me he paid $5,000 an acre for it.

Q. Just answer my questions, please. All you know is that people told you that they paid this or that for this piece of property or another?

A. We paid about that for our own property.

Q. Did you ever hear of a sale of land on the river bank in a strip thirty feet wide from the water's edge?

A. Well, I have heard of it. I know they sold property up and down—I heard they sold property up and down the bank; I heard that, but I don't——

Q. But you don't know of any such sales?

A. No. You asked me if I had heard of that. I have heard of it.

83 Q. You testified that the fair market value of a strip of land amounting to 0.10 acre lying between 566 and 574 were worth $250; is that correct?

A. No, sir; $125.

Q. $125 was your estimate of one-half the value?

A. It was one-fourth the value, which was $125 of your one-tenth acre.

Q. You estimated the value of the flowage easement at $125?

A. You mean from 566 to 574?

Q. 574.

A. Your intermittent flowage easement; is that right? Is that what you mean?

Q. That's right.

A. That's right.

Q. On what basis do you rest that estimate?

A. I figured that there was on about a half-value basis, and that this was about on a one-fourth of the value basis.

Q. Do you know about how often that land has been flooded in the past?

A. No, sir; I don't.

Q. By natural causes?

A. You would be the only man that would know that.

Q. Do you know how often it will be flooded?

A. No, sir.

Q. How do you, then, fix a value on something that you do not know?

A. Well, if it is flooded at all, why it is flooded, and if you happened to put anything down there it would get flooded.

Q. Is there a difference between its being flooded once a year and ten times a year?

A. Well, your fluctuation of your dam down there holds the water quite a bit longer. Is that right?

Q. Do you know the present superficial area of the land which you bought which is now above normal pool elevation?

Mr. JAMES. Will you repeat that? I didn't get that.

(The question was read:)

Mr. JAMES. What do you mean by superficial area?

Mr. BOYD. The surface area.

A. The superficial area, you say?

Q. The area of the land which you now have which is above normal pool level.

A. You mean from 574——

Q. No; I mean above normal pool level, that land which is above the water at 566.

A. 566? Do I know how much area I have?

84 Q. Yes.

A. No. I don't believe I do exactly.

Q. It is a fact, is it not, that all the——

A. The deed—our deed will show you what we have.

Q. One moment, please, till I finish my question. It is a fact, is it not, that the fill which you have put in covers substantially all of the land that ever was under water at 566?

A. I don't know as I follow you on that.

Q. Isn't it a fact that the area of land which you now have above normal pool level is equal to or nearly equal to the area of 3.10 acres which you testified about earlier as being the area when you bought it?

A. What elevation would you base that on?

Q. That land which is now above water—that land which is now above 566.

A. Well, you was down to 555, was where you brought your water from, is that right?

Q. Depending on the time. It will vary.

A. Well, I know that.

Q. When you bought it it was 566?

A. 555 or '6 on your land there. No, I don't think——

Q. You don't know the area today, is that correct?

A. That's right, but I don't think——

Redirect examination by Mr. JAMES:

Q. Mr. Dickinson, was any part of your residence built on filled land, or all on solid land?

A. It is all on solid land.

Q. You spoke of part of your foundation being disturbed by a crack in the bank and part of it sinking some. Which end of the house was that?

A. That was on—it was on two places in the house; one was down in the basement; the other was completely up on top of the bank, up in the garage and in the office.

Q. The garage and office had no excavation at all?

A. No, sir; not any at all.

Q. That was the lightest end of your house?

A. That's right.

Q. And yet you say that is the end that settled?

A. That's right.

Re-cross-examination by Mr. BOYD:

Q. Isn't it so, Mr. Dickinson, that houses built in such situations as, that, in such manner as your house is built, usually settle?

A. Talk a little louder, so I can hear you.

85 Q. Is it not so that houses built in situations such as yours and by methods such as yours, usually settle and suffer some cracking and damage?

A. No; if there is a proper foundation put under them; no.

Redirect examination (resumed) by Mr. JAMES:

Q. Did you have the proper foundation under yours?

A. Yes.

(Witness stands aside.)

Mr. JAMES. Your Honor, inasmuch as we are running the other witnesses together, and the other witnesses will testify to both properties, I thought we would put the two plaintiffs on first.

FRANK H. WITHROW one of the plaintiffs, called as a witness by the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. Will you state your full name?

A. Frank H. Withrow.

Q. You are the plaintiff in this suit of Frank H. Withrow against United States?

A. I am.

Q. Where do you live, Mr. Withrow?

A. I live in Spring Hill, South Charleston.

Q. How long have you lived there?

A. I have been there twenty-three years.

Q. Are you the owner of the property described in the bill of complaint in this suit?

A. I am.

Q. How long have you owned it, Mr. Withrow?

A. I have owned it, I think, twenty-four years. The deed will show.

Q. From whom did you purchase this property, Mr. Withrow?

A. Gebhart—C. H., I believe, Gebhart.

Q. I hand you what purports to be a certified copy of deed from Mary J. Gebhart and C. H. Gebhart to F. H. Withrow, dated April 23, 1921, and ask you if that is a certified copy of the instrument by which you acquired this title?

A. It is.

Mr. JAMES. For the benefit of the record, I would like to state that minor parts of this property were later sold by Mr. Withrow to R. R. Greathouse and to Augusta V. Shannon, but by subsequent deeds, Mr. Withrow acquired title to all of this land, such title having become vested in him prior to February
86. 6, 1934. This is shown by five mesne conveyances, and we here offer those five deeds, together with the first deed testified to from Mr. Gebhart, as Exhibits Withrow 1 to 6.

WITHROW EXHIBITS 1 TO 6

The papers referred to were admitted in evidence, marked respectively, Withrow Exhibits 1 to 6, inclusive. The same are hereto attached as a part hereof.

Q. Mr. Withrow, did you sell a part of this property to a Mr. White some two or three years after the flooding of your property?

A. I did.

Q. Do you recall the date of that deed?

A. March 15, 1941.

Q. I hand you what purports to be a certified copy of a deed by you and wife to George F. White and Vera White, dated March 15, 1941, and ask you if that is the deed that you have reference to?

A. It is.

Mr. JAMES. We offer it in evidence.

WITHROW EXHIBIT 7

The paper referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Did you later have occasion to execute a corrected deed to Mr. White for the same property.

A. I did.

Q. Do you recall the date of that corrected deed?

A. The 9th of October '41.

Q. I hand you what purports to be a certified copy of a deed designated "Corrected Deed," dated October 9, 1941, by F. H. Withrow and wife to George F. White and Vera White. I will ask you if that is the deed, or certified copy of the deed, you have reference to?

A. It is.

Mr. JAMES. We offer it in evidence.

WITHROW EXHIBIT 8

The paper referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Do you recall the occasion for the corrected deed, or the purpose of the corrected deed?

A. It was conveying to them the river bank, is my recollection.

Q. Had that been omitted by inadvertance in the first deed?

A. It was.

Q. Was there any additional consideration given to you for the corrected deed?

A. There was not.

87 Q. Mr. Withrow, do you own, and does your property include, any land west of the dead end of River Drive?

A. Yes, sir; it does. It includes five feet.

Q. Do you know when you acquired that property?

A. I will have to see the deed. I have a certified copy.

(Mr. James hands witness paper.)

A. The 7th day of February 1922.

Q. Do you have in your hands a certified copy of the deed by which you acquired that property?

A. I have.

Q. Did you acquire more than five feet by that instrument, or ——

A. I acquired 40 feet by this instrument, and reconveyed——

Q. And did you later convey to someone else all but the five feet?

A. I did.

Q. And to whom did you make that conveyance?

A. I made it—on August 25, 1928, I conveyed 35 feet to E. W. and Addie Hays.

Q. Retaining the five feet next to the dead end street?

A. Yes, sir.

Q. Do you have in your hand a certified copy of that last deed?

A. I have.

Mr. JAMES. We offer these as exhibits.

WITHROW EXHIBITS 9 AND 10

The papers referred to were admitted in evidence, marked, respectively, as above indicated. The same are hereto attached as a part hereof.

Mr. Withrow, did the Government furnish you with a map or drawing of your property involved in this proceeding?

A. I did.

Q. Do you have in your hands a copy of that map?

A. I do.

Q. Map entitled "Kanawha River Flowage Survey, Winfield Pool, Parcel 1012, U. S. Engineers Office, Huntington, West Virginia, June 1936 and June 1941."

A. Yes, sir.

Mr. JAMES. We offer that as Withrow Exhibit 11.

WITHROW EXHIBIT 11

The paper referred to was admitted in evidence, marked as above indicated. The same is hereto attached as a part hereof.

Q. Mr. Withrow, are there any mortgages, deeds of trust or other liens upon this property?

88 A. There are not.

Q. What the the dimensions of this property, or the property involved in this proceeding?

A. 180 feet front by approximately 185 feet deep—eighty to eighty-five feet; I am not just exactly sure about that. The lots are narrower on the upper part of the addition than they are down below.

Q. Is there a street or purported street included in this property?

A. There is, known as River Drive.

Q. Has that street ever been marked out or paved?

A. It has not. It has been designated on the map, but not used as a public street.

Q. Has it ever been used as a public street?

A. It has not.

Q. What is the condition of the street there now? What is it used for?

A. The street now is used as a lawn to the adjoining property owners.

Q. It is a part of your back lawn, then?

A. It is a part of my lawn, yes.

Q. What is the area of the land between so-called River Drive and the river. You can make use of the Government's map in answering that question, if you care to.

A. 0.11 acre and 0.04 acre.

Q. Is that the part which is permanently flooded?

A. It is.

Q. And what is the 0.04 acre?

A. That is the part that was supposed to be occasionally flooded.

Q. Well, what is the area of the whole river bank?

A. The whole river bank?

Q. Between River Drive and the river. Your map shows there. Look on the map.

A. 33 on the upper side and 37 on the lower and by 180.

Q. And what is that in area? Right at the top of the map, Mr. Withrow.

A. 0.27 acre.

Q. Does this map indicate the five feet which you own at the dead end of River Drive?

A. Yes, sir; it does.

Q. Mr. Withrow, what was the condition of that river bank before the stage in the river was raised in connection with the Winfield Dam?

A. Well, on the bank he had trees—we had between fifty
89 and sixty trees, and then smaller shrubbery, and there was no erosion or washing of any kind. I considered it a perfect river bank, forming a nice background for a home.

Q. Were those trees large enough to be valuable shade trees?

A. They were.

Q. How long had you been familiar with that property before the flooding and the raising of the pool stage?

A. I had been familiar with it ever since I lived there, for twenty—well, I moved there in '21. I was familiar with the property a year or so before I moved down there.

Q. Can you tell the Court whether or not there has been or were any evidences of erosion across the front of your property during that twenty years?

A. There was not.

Q. What are the prospects of River Drive being paved, in view of your ownership of the surrounding property?

A. There are no prospects, as far as I know. No sufficient reason for it to be paved.

Q. Do you have an outlet through another street?

A. I have, which street is at the rear entrance to my property, known as Kanawha Drive, and is paved.

Q. I believe that street is designated as Kanawha Street on the Government's map.

A. That's right.

Q. Do you use that in getting in and out of your property now?

A. I do.

Q. Mr. Withrow, in buying these seven lots and the river bank in front of it, did you buy it all for one purpose or for different purposes? I have reference now to the river bank as distinguished from the lots.

A. I bought it for one purpose.

Q. And what was that purpose?

A. That purpose was for my home, and to be able to control the entire area which I bought in selling to desirable people, or possibly putting additional buildings on it myself.

Q. Has the river bank and the lots in connection therewith been used since your purchase for one and the same purpose or for different purposes?

A. Ask that question again, please. I just don't——

Q. I say, has this river bank and these seven lots, since you have owned them, been used for one purpose or for different purposes?

A. It has been used for one purpose.

90 Q. And that is a residence?

A. That's right.

Q. Have you had some photographs made of the improvements on this property and the condition of the river bank?

A. I have.

Q. Particularly with reference to the present condition of River Drive, as it now exists?

A. Yes, sir.

Q. Who made those photographs?

A. Mr. R. F. Reynolds, of Spring Hill.

Q. When were they made?

A. They were made last Sunday week, I think the 28th of May.

Q. Were you present when they were made?

A. I was.

Q. Can you state whether or not these pictures correctly portray the physical situation as it then existed?

A. They do.

Q. What improvements are there or were there on this property in September 1938?

A. My home was on the lower part of the property, and at the upper side the four-room stucco cottage with garage, also a garage on my home.

Q. Two residences and two garages?

A. That's right.

Mr. Dyer. If your Honor please, I understand that these photographs are being introduced for the purpose of showing River Drive, and if that is the purpose for which they are being introduced, the Government wants to object, because they are not condemning River Drive. That is a separate and distinct tract of

land, in which the fee is reserved, is outstanding; he doesn't have any interest in River Drive other than as a citizen in common with the other people down there. I don't think it is material what condition River Drive is in.

The COURT. I presume the purpose of the picture of River Drive is to show whether or not the river bank is appurtenant to the residence property?

Mr. JAMES. Yes, sir; and for the purpose of showing a photograph of the two residences on this property and the condition of the river bank with reference to the trees that have been testified to, as well as to the condition of River Drive as it now is and has been since the date of the taking.

Mr. DYER. We want to object so far as it shows River Drive.

The COURT. Overruled.

Mr. JAMES. We offer these.

91 WITHROW EXHIBITS 12 TO 15

The photographs referred to were admitted in evidence, marked, respectively, "Withrow Exhibits 12 to 15," inclusive. The same are hereto attached as a part hereof.

Q. Mr. Withrow, I will ask you if the picture introduced as Exhibit 12 is a photograph of your residence?

A. It is.

Q. And I will ask you if the picture introduced as Exhibit 13 is a photograph of the other cottage and a part of River Drive?

A. It is. It is the upper side of the property.

Q. By that you mean up the river from your residence?

A. Yes, sir.

Q. Mr. Withrow, the photograph introduced as Exhibit 14, I will ask you if that is a picture of the river front looking toward the dead end of so-called River Drive, which shows the shade trees on the river bank now?

A. It is. This is directly in front of my residence.

Q. I hand you picture designated as Exhibit 15 and ask you to state what that photograph shows.

A. This shows the river bank, the upper part of the tract involved.

Q. Do those pictures show the remainder of the seventy-some trees which you testified were on the river bank before the erosion?

A. That's right.

Q. What is your business, Mr. Withrow?

A. I am in the real estate and mortgage loan business.

Q. How long have you been in that business?

A. More than twenty years.

Q. In your real estate and mortgage business have you been concerned with real property values in South Charleston?

A. I have.

Q. Do you think you are qualified to express an opinion as to a fair market value of real estate in South Charleston on or about September 1938?

A. I do.

Q. You risk your money every day on your judgment of real estate values, do you not?

A. Not every day, but——

Q. Frequently?

A. Yes.

Q. What, in your opinion, would be a fair market value of these seven lots and the river bank in front of the lots and the improvements thereon as of September 1938?

92 Mr. BOYD. Objection, if your Honor please——

The COURT. Prior to the flooding or after it?

Mr. JAMES. Well, I will further qualify it by saying prior to the flooding and erosion that followed the flooding.

Mr. BOYD. Objection.

The COURT. State the grounds of your objection.

Mr. BOYD. I think the date should be stated and a particular date fixed before the answer is sought, and also we object to its relevancy, since we do not concede that the taking occurred September 21, 1938.

The COURT. I believe the question has been qualified by the condition that the valuation be fixed prior to the elevation of the water.

Mr. BOYD. Your Honor, there are seven elevations, you see, over a period of two years or more, so that "before the elevation" leaves it too uncertain.

The COURT. You had better fix that a little more definitely, Mr. James.

Mr. BOYD. Also, your Honor, we object because it calls for a valuation of the tracts together, and only a part of the river bank tract is flooded, and the Government does not admit that any part of the landward lots have been taken.

The COURT. I will reserve a ruling on that objection and permit the answer to be made, but further restrict it as to the date you want him to give the valuation.

Mr. JAMES. I think as originally framed I asked for a fair market value as of September 22, 1938, and that being our theory of the date of the taking, I think I had better adhere to the market value as of that date.

The COURT. Then you are wanting his opinion as to market value after the raising of the water?

Mr. JAMES. Possibly some erosion had taken place before that. Most of it took place after the pool was attained, so I think perhaps my question had better retain the date of September 1938, before the erosion took place.

The COURT. I will reserve ruling on the objection. You may answer the question.

A. The 180 feet I valued at $40 a foot, a total of $7,200. My residence at $4,000; garage at $300; the White house at $3,000, and the garage at $250, making a total of $14,750 for the tract and the improvements.

By Mr. JAMES:

Q. Now, Mr. Withrow, will you describe the character and extent of the erosion of the river bank in front of your property that occurred during the raising of the pool stage since the full pool was attained?

93

Mr. BOYD. Objection, your Honor, as irrelevant, since the Government is not liable for erosion. Objected to also because the question does not call for the cause of the erosion as to which the witness is asked to testify.

The COURT. Ruling reserved. Go ahead and answer it.

A. The erosion began when the Government removed the vegetation line prior to the raising of the dam. There was a vegetation line composed of willows and many river growths along the water's edge and into the river. The Government dredged that, took all that vegetation line out and cleaned off the river bank, the part that they proposed to overflow. When that was done the erosion began. Each small raise, some erosion, and of course more erosion on the high raises, but there was a perennial erosion after the removal of that vegetation line and those trees along the water's edge.

Q. About how much of the river bank has been washed away or eroded?

A. There is practically all of the land which the Government has asked for a flowage right has gone into the river. I don't know just the number of square feet or tons of earth, but the entire area, as I see it, has gone in. The engineers probably can testify further than that.

Q. Have any of the trees along the river bank been lost or destroyed?

A. They have.

Q. What happened to them?

A. At various times when there was a rise in the river, those trees went in. I don't have the dates, but from the time that the erosion first began up until the present time—well, there has not

been any gone in for the last several months, because we haven't had any high water, but at various times those trees have slid in.

Q. About how many trees have slid into the river?

A. My estimate is about twenty.

Q. Did you have some photographs made of the parts of the bank that were eroded during this period of erosion that you describe?

A. I did.

Q. Who made those photographs?

A. Mr. R. F. Reynolds, the same party that made the others.

Q. Were you present when they were made?

A. I was.

94 Q. Can you state whether or not those photographs correctly portray the physical facts as they existed then?

A. I can.

Q. And when were the photographs made?

A. They were made on April 16, 1943.

Mr. JAMES. We offer these in evidence.

Mr. BOYD. Are you offering those photographs, Mr. James?

Mr. JAMES. Oh, yes.

Mr. BOYD. I understood this morning that you were of the opinion that there could be no recovery for erosion, but only for protective measures—that that statement was made to the Court. Am I correct in that?

Mr. JAMES. I stated this, that in this suit we were asking the costs of protective measures, which, if installed as of the date of the taking, would have prevented all of this erosion, and therefore we are not predicating our claim on the erosion. However, our theory is that evidence of the erosion as it actually took place is relevant to demonstrate the necessity of the protective work.

Mr. BOYD. If the photographs are offered only for that purpose, I have no objection.

The COURT. All right.

WITHROW EXHIBITS 16 TO 22

The photographs referred to were admitted in evidence, marked, respectively, "Withrow Exhibits 16 to 22," inclusive. The same are hereto attached as a part hereof.

By Mr. JAMES:

Q. Mr. Withrow, was there a sewer line from your house running into the river on this river front?

A. There was.

Q. What happened to it? Did anything happen to it in connection with the erosion and raising of the pool there?

A. It was washed out at the intersection with the river. It was built in by a strong headwall, and after the floods began to come it washed out and still remains out.

Q. It has not been rebuilt?

A. It has not.

Q. Has there been more erosion at the place of this sewer line than elsewhere on your river front?

A. There has not.

Q. About the same, so far as you can tell?

A. About uniform. If anything, there is more about thirty or forty feet above this sewer than there is at the sewer line. The bank has slid in to a greater extent above than it has where the sewer is constructed.

95 Q. Mr. Withrow, has that river bank continued to erode and slip into the river?

A. It has; yes, sir. It slipped in this spring on the last raise, a hard rain we had; we had a very bad slip just above my residence.

Q. Do you have an opinion as to whether or not you will lose the remainder of those trees that are standing on the river bank unless protective measures are put in?

Mr. BOYD. We object, your Honor. That calls for a conclusion of an expert, and he has not shown himself to be qualified.

The COURT. That objection will be sustained.

By Mr. JAMES:

Q. How close is the erosion now to the rim of trees that run along there on the river bank?

A. It varies from three to say six feet. The trees are in the street.

Q. That is, the trees indicated on that map are some of them in what would be River Drive if it were laid out and paved?

A. They are.

Q. How many of those trees did you say had already slipped into the river?

A. Approximately twenty.

Q. Will you state about what their sizes were or would average, say taking the diameter two feet from the ground?

A. Well, they range from six, eight and ten inches. Besides the trees, there was a quantity of small undergrowth, including—well, especially four small dogwoods, which we prized very highly.

The COURT. Were any of these trees that slipped in the river on River Drive?

A. I am not sure, but I think there has been two right opposite my home.

By Mr. JAMES:

Q. Mr. Winthrow, do you know whether this condition of eroding of the river bank is more or less general all the way down the river toward Winfield from your place?

A. It is. It is general, that is, so far as down to St. Albans; I know about that.

Q. Did that condition exist before the Winfield Dam was built and the pool stage was raised?

A. It did not.

Q. When your property started eroding, did you take up with the Federal Government the matter of the damages
96 and the prospects of the Government furnishing you some protective measures there?

A. I did.

Q. In person or by telephone?

A. By letter in practically all cases. I wrote the Engineers' Office in Huntington a number of times, and I also wrote the Engineering Department at Washington and the War Department. I am not sure who all I did write. I gave you the copies of several letters.

The COURT. Mr. James, I believe this a good time to take a little recess, about ten minutes.

(Whereupon, at 3:58 p. m., a recess was taken.)

AFTER RECESS—4:10 P. M.

By Mr. JAMES:

Q. Mr. Withrow, since the river bank has been eroding, have you noticed anything about the level of the ground of what is laid out on the map as River Drive, whether or not there is any settling there?

A. I have. On the lower end of the Drive directly opposite my home the street and bank has sunk, just how many inches I don't know.

Q. How can you tell?

A. I can tell by the ground itself, because of the fact that when I moved there the ground was level clear up the street, and now you can see with your naked eye that the lower part has sunken, and twenty feet below my property line there is a concrete block garage, and that garage has—in the center of it there is a crack that cracked the concrete blocks in the center about a quarter of an inch, on the upper side, and on the lower side about the same amount, and then back of the garage it is even more than that, probably the crack is a half inch, and I could also tell by a picket fence which was built there several years ago, and that picket fence

was level, and now you can see—take a level, and the distance is four to—oh, possibly eight inches; I am not sure. However, the Government engineers at various times came there and run the levels, and I suppose they have that record. They made many surveys along the river bank, and they drove stakes back from Kanawha Street on the inside of the property for the purpose, I suppose, of checking up just what was going on so far as the lowering of the bank and street were concerned; but there is a decided or noticeable sink in the street in front of my home.

Q. I believe you said that after your property started eroding you took the matter up with the Government engineers with a view of getting some protection, if possible.

97 A. I did. I had it up with——

Q. Did the Government also take up with you the matter of procuring flowage easements across your property?

A. They did, a number of times.

Q. Was there any correspondence between you and the Government engineers on those subjects?

A. Quite a lot of it.

Q. Mr. Withrow, I hand you what purports to be an original of a letter written to you by S. D. Sturgis, Jr., Captain, Corps of Engineers, Assistant, United States Engineers Office at Huntington, West Virginia, on April 18, 1939, and ask you if you received that in the United States mail?

A. I did.

Q. Did you reply to that letter?

A. Yes, sir.

Q. Do you have a carbon copy of your reply?

A. I have.

Q. Did you enclose the original of your reply in a sealed envelope, properly addressed, with the legal amount of postage on it, and deposit it in the United States mail?

A. I did.

Q. Did you reply to that letter?

A. Yes, sir.

Q. Do you have a carbon copy of your reply?

A. I have.

Q. Did you enclose the original of your reply in a sealed envelope, properly addressed, with the legal amount of postage on it, and deposit it in the United States mail?

A. I did.

Mr. JAMES. We offer the original and also his reply.

Mr. BOYD. Those are objected to, your Honor, on the same grounds as the correspondence in the Dickinson case.

The COURT. Ruling reserved.

WITHROW EXHIBITS 23 AND 24

The papers referred to were admitted in evidence, marked, respectively, as above indicated. The same are hereto attached as a part hereof.

By Mr. JAMES:

Q. Mr. Withrow, I believe you have already testified as to the area of your property that is to be flooded or has been flooded permanently?

A. Yes, sir.

Q. That is 0.11 acre?

A. That is right.

Q. And have you testified as to the area to be flooded intermittently, that is, between contour 566 and contour 574?

A. That is 0.04 acre.

Q. I believe you have also——

Mr. BOYD. Your Honor, there is no showing that there is going to be any intermittent flooding above 574; that is above 566 to 574.

The COURT. I understand that is based on the testimony of the other witness.

98 Mr. JAMES. The letter I introduced a moment ago bears that out, your Honor.

The COURT. Overruled.

Mr. JAMES. Of course, these Government maps all show that the easement area that the Government has desired from the very beginning extends up to 574. I think this Court can assume that the Government intended to make some use of it or it would not be acquiring it.

Mr. BOYD. They show simply that the Government desired simply to acquire the land. They do not show that it was intended to flood it to that altitude.

The COURT. All right; go ahead.

Mr. JAMES Well, pardon me, but I think as a legal proposition the Government probably does not have the right to acquire something that it does not need and would not use in connection with the navigation project.

Q. Mr. Withrow, I believe you have already expressed your opinion as to the market value of all of your property as of September 22, 1938?

A. Yes, sir.

Q. Can you express an opinion as to the fair market value as of September 1938 of a flowage easement to permanently flood the 0.11 acre—permanently flood it as shown upon the Government map?

Mr. BOYD. Objected to.

The COURT. Mr. James, I don't know that I get exactly what you are driving at. It seems to me that the proper question there is, what is the value of that particular land that is being taken and inundated?

Mr. JAMES. I think that was the effect of my question.

The COURT. You are asking him what the value of the flowage easement is over that acreage.

Mr. JAMES. Of course, I think it is true that land is taken a hundred percent when you flood it permanently, but I had framed my question so I would not indulge in that assumption.

The COURT. All I want to know is, you are not intending to bring any outside elements into that?

Mr. JAMES. That's right.

The COURT. And not in any event to go beyond the value of the land itself?

Mr. JAMES. That's right.

The COURT. All right.

Mr. JAMES. Q. Will you now give us the fair market value of the 0.11 acre across your river bank which has been permanently flooded?

A. I have it at $297.

99 Q. Would you mind indicating how you arrive at that value?

A. Well, how I arrived—the other land per acre is practically $5,400—fifty-four or five hundred dollars; and this at one-half value, $2,700 an acre, which 0.11 would be $297.

Q. I believe 0.04 acre is to be flooded temporarily. Instead of asking you the fair market value of the 0.04 acre, I will ask you to what extent, in your judgment, will that 0.04 acre be damaged or taken by intermittent flooding?

Mr. BOYD. Objected to, your Honor. It calls for an opinion which this witness is not qualified to give.

The COURT. Overruled.

A. To my opinion, the damage to that by intermittent flooding will be equal to the damage to the 0.11 acre, for the reason that the damages caused by erosion, and it will erode—in fact, it has——

Mr. JAMES. Just a minute, Mr. Withrow. Answer my question on the assumption that there will be protective measures there sufficient to prevent any erosion. Now, just assume that it will be intermittently flooded.

The COURT. Leave the question of erosion out of it.

A. Well, I had that at the same price per acre as I did the 0.11, and took the one-half value for occasional flooding, which value amount to $55, making a total value of the 0.11 and 0.04 of $352.

By Mr. JAMES:

Q. Now, Mr. Withrow, let's be sure that we understand you. In arriving at your $55 of value of the 0.04 acre, you have assumed that intermittent flooding takes only one-half of its value, whereas permanent flooding of the 0.11 acre takes the entire value. Is that correct?

A. That's right. That is the figures I have down.

Q. Have you gone to the trouble of ascertaining what it would have cost you to put in adequate protection before the flooding took place, that is, protection which would have been sufficient to prevent all this erosion which you have described?

A. I have.

Q. Did you get that information from a competent engineer and contractor?

A. I got that information from Mr. Keeney and Mr. Plumley, who are present and will testify.

Q. They will be here to testify in this case?

A. They will testify.

Q. What do you understand will be the cost as of 1938 of putting in this protective work?

Mr. BOYD. Objection, your Honor.

100. Mr. JAMES. That is hearsay, of course.

The COURT. Ruling reserved. The objection would be sustained except that there is to be other evidence on the same point. Of course, this hearsay evidence will not be considered, but at the same time I will permit it to go in, with a ruling on the main issue later.

Mr. BOYD. The main issue being liability, of course.

A. Well, to make a complete, over-all job as per estimate, it will cost $2,300.

Cross-examination by Mr. WILLIAMS:

Q. Mr. Withrow, had the land between 554.65 and elevation 566 ever been overflowed prior to the construction of the Winfield Dam?

A. May I see this map?

(The Court hands map to witness.)

Q. Well, that is the old pool level of Dam 7, before the raising of the water.

A. No, it had not been overflowed.

Q. It had never been overflowed by natural floods?

A. It had not.

Q. Natural floods had never gone——

A. Now, wait a minute. Get the question again. You mean the river had risen up over this?

Q. Yes.

A. I am not in position to say just how high that river has been along there, but I am in position to say that there was no erosion or washing of the bank.

Q. That is not my question. My question is, the elevation of the old pool was 554.65. Did the water rise above that during high water? Did the water overflow land above the elevation of the old pool?

A. Yes, sure it did.

Q. Do you know approximately how often it did that?

A. No, I couldn't say. We have had many raises.

Q. Did you take into consideration in giving your valuation just a moment ago to Mr. James that the land had been overflowed previously and was subject to overflow before the construction of the Winfield Dam?

A. But no damage occurred. I realize that there was high water then the same as there is now, but there was no damage occurred from the raises in the river.

Q. You gave the river bank tracts the same valuation per acre as the land up above the river, did you?

A. Oh, no.

The COURT. One-half, he said.

101 Mr. WILLIAMS. One-half on the overflowed lands, I think.

A. It would be one-fourth on the occasional overflow. I took half of the permanent overflow and one-half of a half, which would be one-fourth of the value for——

Q. In reaching that value, did you reach it on a basis of the fact—did you consider the fact—that the land was overflowed before the raising of the water by Winfield Dam?

A. I estimated it at the original stage before the raising of the Winfield pool.

Q. Do you know whether the plat dedicating River Drive is recorded?

A. It is.

Q. Where is it recorded? In what county?

A. In the Kanawha County Clerk's office. We have a certified copy of the map. Probably it will be introduced a little later.

(Witness stands aside.)

Mr. JAMES. I have one other witness that will be very short, and it will be difficult for him to come back tomorrow, and I would like to put him on.

EARL Y. HAYES, called as a witness for the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. State your full name, please, sir?

A. Earl Y. Hayes.

Q. Where do you live, Mr. Hayes?

A. I live in Spring Hill, on Kanawha Street.

Q. Do you own the property immediately to the west of Mr. Frank H. Withrow?

A. I do.

Q. You are the gentleman to whom he conveyed all of lot 10 of the Settle Addition except five feet, aren't you?

A. That's right.

Q. I believe you have a similar suit pending in this Court?

A. That is true.

Q. How long have you been familiar with the F. H. Withrow property, Mr. Hayes?

A. Since about 1925.

Q. Were you familiar with the River bank on the Withrow property prior to say August 1937?

A. Yes.

Q. Was there any evidence of the erosion along the river bank prior to 1937?

A. There was no evidence at that time.

Q. Had there been for several years previous to that?

A. No.

102 Q. Are you familiar with the erosion that has gone on since the construction of the Winfield Dam and pool?

A. Yes, I am.

Q. State, if you know, whether or not that general condition of eroding banks continues on down the river toward St. Albans and Winfield?

A. It does.

Q. Do you know whether that is true on the north side of the river or not?

A. No, I don't know whether that is true on the north side or not.

Q. But you are familiar with it on the south side?

A. That's right.

Q. Do you know about how many trees have been washed into the river on the Withrow river bank there?

A. I don't know just how many, but there has been considerable went in, approximately—oh, I would say twenty.

Q. About what size trees?

Mr. WILLIAMS. I want to move to strike that answer. He has not shown when the trees were washed in the river or what caused it.

The COURT. Well, he said there was no erosion before the water was raised and they have since gone in. I will overrule the motion, reserving ruling as to its pertinency.

By Mr. JAMES:

Q. Do you know approximately when those trees were washed into the river, Mr. Hayes?

A. Well, just approximately along in—after the water was up probably a year and a half or two years—something like that.

Q. Have you noticed, Mr. Hayes, whether or not the part of Mr. Withrow's lawn there included in River Drive—whether that has settled in the last two or three years?

Mr. BOYD. I object, your Honor. There is no question of taking River Drive. That does not belong to either of these plaintiffs, but belongs to another.

Mr. JAMES. The man has got an interest in it—very much of an interest.

Mr. BOYD. He has no more interest than I have in the street outside this court room.

Mr. JAMES. Your Honor, as an abutting property owner, of the land all around it, I think he has a very substantial legal interest.

The COURT. The question will be admitted and ruling reserved as to its pertinency.

103 By Mr. JAMES:

Q. Did you say you had noticed that?

A. Well, yes from what we can gather, I should say it has sunk anywhere from four to eight inches.

Q. Mr. Hayes, do you know whether or not this river bank erosion is continuing?

A. Well, it is.

Cross-examination by Mr. DYER:

Q. Mr. Hayes, you say that River Drive has sunk from four to eight inches. Did you make any surveys and calculations with instruments?

A. Nothing any more than by some pictures that have been taken, and by the garage.

Q. Then you state prior to the elevation of the water by reason of the operation of the Winfield Dam there was no erosion on this side of the river?

A. There was no erosion.

Q. Yes.

A. No; it wasn't noticeable.

Q. Then when the river was up in high tides, the bank did not erode at all? Is that what you mean to state?

A. No, not noticeably.

Q. Don't you know that river banks erode by reason of freezes and thaws?

A. Well, they might do it where there wasn't protection.

Q. Do you remember the high tide in October 1937?

A. I do.

Q. Was there any erosion then?

A. Not as I remember.

Q. Did not effect the banks in any way then?

A. You mean when?

Q. 1937, which was the highest flood in nineteen years.

A. That is after the dam, wasn't it? The first flood or two after this water raised is when your bank went in.

Q. The first flood?

A. That's right.

Q. And you noticed that erosion more than any other time immediately after floods?

A. That's right. It seems to go in whenever it rains.

Q. Let's take the south bank along by your property and on below. That bank is practically of a perpendicular nature, and was that way before the elevation of the water on it, wasn't it?

A. You mean before you raised it?

104 Q. Yes.

A. Well, you could walk up and down it right on the bank. There was a beach.

Q. That on the south side was much steeper and more perpendicular than that on the north side of the river, isn't that true?

A. On the south side?

Q. Yes; the side on which your property was, the bank is much steeper than it is right opposite on the other side of the river?

A. Well, I couldn't say that; I don't know. I don't go over there.

Q. Can't you see from your property across on the other side?

A. I can see across, but I am no judge of elevation that far.

Q. What is the nature of the deposit of sand in the north side of the river from above Davis Creek on down opposite your property through there?

A. Well, I would say it is sandy in patches. I don't know just what it is.

Q. Can you give the reason why the sand is deposited on the north side and not deposited on the south side?

A. No, I can't.

Mr. DYER. That is all.

Mr. JAMES. That is all, Mr. Hayes.

The COURT. Let me ask you this. You said you could walk up and down the bank before any erosion took place. Was there any vegetation on the bank?

A. Yes, there was.

Q. What was it?

A. There was just small shrubbery and—you know, vines, honeysuckle vines and things like that.

Q. Any trees growing there?

A. Yes, there were trees.

Q. What size trees?

A. They ranged anywhere up to eight or ten inches.

Q. Do you mean these trees were growing on the sloping part of the bank, the steep slope that Mr. Dyer was asking about?

A. That's right, they were.

Q. Were they growing straight up or were they leaning?

A. No, they were growing straight up. We had a beach there.

Redirect examination by Mr. JAMES:

Q. Mr. Hayes, do you know whether or not on the Withrow property the Government cut down and took out all of that
105 vegetation that you have described as being along the river bank?

A. They did.

Re-cross examination by Mr. DYER:

Q. Do you know the date on which the banks were cleared by the Government?

A. No; I don't know just the exact date.

Q. Up to what elevation was the shrubbery taken off?

A. Well, I don't know.; I can tell you on mine.

Q. Was it before or after the water was raised that they cleared those off?

A. It was before.

(Witness stands aside.)

Mr. JAMES. The next witness, your Honor, will be rather extensively examined both in chief and on cross.

The COURT. Well, I suppose we might as well adjourn for the day.

(Whereupon at 4:47 o'clock p. m., Court adjourned until 10:00 o'clock a. m. the following morning.)

SECOND DAY

Tuesday, June 6, 1944, 10:00 o'clock a. m.

Court met pursuant to adjournment of yesterday.

GARDINER S. PLUMLEY called as a witness for the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. Will you state your full name?

A. Gardiner S. Plumley.

Q. Where do you live, Mr. Plumley?

A. I live in Charleston.

Q. How long have you lived in Charleston?

A. Thirty-eight years.

Q. What is your business or profession?

A. I am a registered professional engineer and have been ever since the law was started, and I am also engaged in the real estate business.

Q. How long have you been practicing the profession of engineering?

A. Ever since I have been in Charleston and some years prior to that.

Q. You say you have also dealt in real estate?

A. Yes, sir.

Q. In the Kanawha Valley?

A. Yes, sir.

Q. And how long has that interest of yours continued?

A. Well, I have been interested for years. I have been a
106 licensed real estate broker for the last six or seven years.

Q. Mr. Plumley, are you familiar generally with the Kanawha River between Winfield and Marmet?

A. Yes, sir; most of my experience has been in Kanawha and adjacent counties along the watershed of the Kanawha River.

Q. In connection with your engineering work, have you had occasion to be concerned with the Kanawha River?

A. Yes, sir.

Q. The structures along the bank of the Kanawha River?

A. Yes, sir.

Q. Have you had occasion to study the soil formation or conditions of erosion in the Kanawha Valley?

A. I have.

Q. Did you have anything to do with the engineering work in connection with the Carbide Chemicals Corporation plant at South Charleston, particularly on Blaine's Island?

A. Yes, sir. I made all of the preliminary surveys for the Carbide on Blaine's Island and made a soil study. We made tests—various kinds of tests of the soil to determine its bearing power. I had something to do with the preliminary idea of raising the island and riprapping its banks.

Q. Have you had any similar experience prior to that particular job?

A. Well, I have had a good deal of experience along the rivers, not necessarily always Kanawha River, but in connection with railroad fills in the river, both in Elk and in Gauley.

Q. You have had experience in the field of riprapping or protective work along the Kanawha River?

A. Yes, sir.

A. Have you had occasion to make a study of the W. M. Dickinson property at South Charleston which is involved in this suit?

A. Yes, sir.

Q. Have you had occasion to make a study of the erosion conditions on the river bank of this particular property?

A. Yes, sir.

Q. Do you know the extent to which erosion has taken place on this property?

A. Yes, sir. I do so far as I can see the particular property. The erosion is somewhat hidden by Mr. Dickinson's riprapping and fill at the present time, but I have studied the erosion of the river along the banks above and below Mr. Dickinson's property, where it can now be seen.

107 Q. Have you made an examination of the Government maps which show the contours of the river bank before the erosion and before the fill?

A. Yes, sir.

Q. Have you made a careful study of those maps?

A. Yes, sir.

Q. Can you tell us, Mr. Plumley, what was the cause of the erosion on the Dickinson property?

A. The cause was the rising of the pool, and the thing that brought it about more than anything else was the cutting of the vegetaiton between the lower pool and the new pool and up to elevation 574.

Q. I have reference now to the Dickinson property.

A. The Dickinson property was subject to the same sort of erosion as the rest of the river.

Q. Can you elaborate a bit on just how the raising of the pool stage causes erosion such as happened at the Dickinson property?

A. Yes, sir. When the pool was at its old stage, the banks had generally become stabilized through time, and the angle of inclination of the banks along the Dickinson property, and in many other places where there is very little wash, is usually from 1½ to 1 to 2 to 1. When the pool was raised the wave action along the new pool washes out a beach. At the old pool a beach had been more or less established and the soil had washed into the river and it was more or less stable. Now, the minute you change the level of the water—and it is worse when the changes are successive—the wave action washes back into the soil until a new beach

is formed, and then the bank tends to cave, and it caves, usually leaving a very steep slope, and that slope falls down until the bank is back to its stable slope of say between 1½ and 2 to 1—more nearly 2 to 1.

Q. Does the saturation and softening of the soil by raising the pool have anything to do with the erosion?

A. Yes, sir; I think it has a great deal to do with it. Our Kanawha River soil is largely clay, and along the river properties it is sandy clay, and when clay is dry it is very hard, but the minute you mix it with water it tends to run until it is liquid mud. That is true in all of our slide conditions, and West Virginia has a great many along the banks and back from the banks, all from the same source, that the soil becomes saturated with water and won't stand up.

Q. You have examined the soil at Dickinson's property?

A. Yes, sir.

108 Q. Are you familiar with the character of the soil generally in the Kanawha Valley between Charleston and St. Albans?

A. Yes, sir.

Q. Is there any difference between the character of the soil at Dickinson's and the soil generally in the Kanawha Valley between Charleston and St. Albans?

A. It is generally the same; it is a sandy clay. It varies somewhat. Sometimes the clay is firmer, sometimes more sandy.

Q. Is the character of the soil at Dickinson's property and particularly where his house is built of such kind as to afford suitable soil for the foundation of a house such as he has built there?

A. Yes, sir. I have examined the foundation very carefully, and all of Mr. Dickinson's house is on firm original ground, and the soil will support many times the weight of his house.

Q. Is that the same sort of soil that most of the houses in Spring Hill and South Charleston are constructed on?

A. Yes, sir.

Q. Mr. Plumley, you spoke of the angle of inclination or angle of repose along the Dickinson property in its state before the construction of the Winfield Dam. Have you made a drawing or sketch indicating the angle of that river bank before Dickinson placed his protective work there and also showing the extent to which Dickinson has filled that by his protective work?

A. Yes, sir, we made a rather detailed and careful survey, and we used as the base for our original ground the typical cross-section and the contours as given on the various Government maps.

Q. About what was the angle of the Dickinson property bank there prior to the erosion?

A. It varies from 1¾ to 2 to 1.

Mr. Boyd. Objection unless the date is fixed. "Prior to the erosion" is quite meaningless. The date as of which this determination is made should be stated.

The Court. Mr. Boyd's objection is well grounded. The date ought to be given.

Mr. James. Strike that last question, Mr. Price.

Q. What was the source of your information as regards the angle of repose or the angle of the river bank at the Dickinson property, and upon which you based your calculation?

A. The source of my information was the U. S. Engineer Office maps, one of which—and one which I used more than any other—is entitled "Kanawha River Flowage Survey, Winfield Pool, Parcel 1038 A," and is dated July 1936. Now, it shows that there were some subsequent revisions, but I think the basic map was made around 1936.

109 Q. That was the source of your information, then?

A. Yes, sir: it was the only source I could get, because the original surface is covered with Dickinson's fill, and except—well, I checked it pretty well. I checked it by the trees. There are many trees in front of Mr. Dickinson's house which are protected by brick wells, and you can look down those wells and find the original soil at the roots of the trees, and you can identify that by the swelling of the roots, and it checked up very well with the Government's survey.

Q. What was the angle of repose or the angle of that river bank determined by you and based upon that information which you detailed?

A. Between 1¾ to 1 and 2 to 1. It varies between the two.

Q. Is that angle sufficient for a stabilized river bank in the case of the kind of soil which you described here as the Dickinson soil?

A. Yes, sir, particularly if it is protected.

Q. Protected either by vegetation——

A. By vegetation or by some artificial means.

Q. Was there sufficient vegetation here to protect the Dickinson bank prior to——

A. I never saw the bank before the fill—Mr. Dickinson's fill was made—but judging from the other banks adjoining it there was sufficient vegetation.

Q. Based upon that same information as to the angle of the river bank at Dickinson's property, did you make a calculation to determine approximately how much earth and rock fill Dickinson has put in there?

A. Yes, it had to be pretty much of an estimate. The actual cross-sections of the ground as it now is and the original ground as shown on the Government maps make an estimate of about 11,000 cubic yards. Now, that does not take into consideration the amount of land which was robbed by the wave action and caving into the river, and the amount of land that was carried away by floods, and the amount of fill that Mr. Dickinson dumped into the river. The day I made my cross sections I did not have a boat, and I stopped them at the river line.

Q. Assuming that approximately 5,000 cubic yards of that bank had washed into the river before Dickinson started his fill there, does your calculation check out pretty well with Dickinson's figures of having piled in there some 16,000 cubic yards of earth and rock?

A. I think it is entirely possible that 16,000 cubic feet——

Q. Cubic yards.

A. Cubic yards of earth and rock were dumped by Mr. Dickinson. Just how much I couldn't say, but from the pictures that Mr. Dickinson has shown me there was a large quantity of river bank that slipped in the river, and that had to be replaced by Mr. Dickinson. I should say fifteen or sixteen thousand yards is well within the probabilities.

Q. Mr. Plumley, where is the principal channel or current in the river opposite Dickinson's property?

A. It is about a quarter of the way across the river to the middle of the river. The river is surprisingly—the bottom of the river is surprisingly level. I measured it all along Dickinson's land, and it was from twenty to twenty-two feet deep.

Q. That is, you made soundings in the river opposite?

A. Yes, sir. I say further that I checked those soundings with the soundings that were made and shown on the Government survey. I don't recall the date exactly, but I have it here. [Witness refers to map.] Survey of 1929 and 1930. I checked the soundings as nearly as I could, and I found that they checked very well indeed—checked within the foot.

Q. Has there been any change in the location of the current or channel of that river since 1930 or 1929 to the present time?

A. It would be my opinion that there has not been any change. I have never noticed any very great changes of current in the Kanawha River or in any of our rivers. Our rivers are pretty steep, and the currents remain the same and the banks do not change very much.

Q. That is not true with respect to all kinds of streams, is it?

A. No, you get the flat streams like the Mississippi and it notoriously wanders all around, but that doesn't occur in our coun-

try. The river has appeared to be, as long as I have known it, over a period of nearly forty years—the river has changed very little except the pool has been raised recently.

Q. There is a reason for that, isn't there?

A. Yes, I think there is a reason.

Q. What is it?

A. It is on account of the—it is a steep river, and the water doesn't—in very flat streams you will notice that the stream winds around, and in time of freshets will change its complete channel, but that is not true of our streams; that is not true of the Kanawha River.

Q. Can you state whether or not the erosion at the Dickinson property has been caused by deflection of the channel or current against that property?

A. No, I would say very definitely that the current does not flow against that property. You can stand a little below the Dickinsons and look up the river and you can see that the mouth
111 of Davis Creek, which is just above the Dickinson property by only a hundred yards, is in—in a kind of an eddy. The current from Blaine's Island and from the Government plant below Blaine's Island—rather, the shape of Blaine's Island and the shape of the river deflects the current over to the northern bank.

Q. Is there any physical fact or circumstance in times of high water that bears out that view?

A. Well, you can stand at Dickinson's and look across to the low islands opposite Dickinson's which were formed by the flow of Tyler Creek, and you can notice that the drift and old boats and so forth is piled on the upper end of the island. You can see that now.

Q. That is, the debris is deposited on the north side of the river?

A. Yes, sir.

Q. Rather than on the south side?

A. Yes, sir.

Q. Were you generally familiar with the condition of the river banks of the Kanawha River between Charleston and St. Albans prior to the construction of the Winfield Dam?

A. In a general way, yes.

Q. Can you state whether or not there was any appreciable amount of erosion going on prior to construction of the Winfield Dam?

A. Well, there is always erosion on river banks, but the erosion since the construction of the Winfield Dam is markedly—has markedly increased, in my opinion, and is caused by the raising of the water.

Q. State whether or not the condition of erosion of the river banks is more or less general in the entire Winfield pool?

A. Yes, sir; it is, wherever the banks—has not been protected and wherever it is at all steep, erosive action is evident, and in some cases, where the bank is completely unprotected—I looked at a particular piece not very far below Dickinson's where there were no trees or practically no vegetation, and that bank had just flattened out to about 2 to 1, with a beach at the bottom.

Q. Do I understand you, then, that generally speaking, the angle of repose is about 2 to 1?

A. Well, it depends entirely on the nature of the material. A rock fill will stand up sometimes—very heavy rock will stand at 1 to 1; and run of the quarry, such as Dickinson used in his fill, will stand at about 1½ to 1, and it is usual for engineers in making fills to use 1½ to 1 as the angle of a fill slope. If the ground is sandy and affected by water and affected by
112 saturation, a sandy clay such as we have at Dickinson's, why it is going to flow out to a flatter slope than 1½; it will be more nearly 2 to 1. If it is a slide, and the water continues to permeate it, it will flow out to 3 to 1.

Q. Referring again to the matter of current or channel at the Dickinson property, is there not a little tributary stream, or the mouth of a tributary stream, just immediately above Dickinson's property?

A. Well, Davis Creek.

Q. Have you noticed whether or not there is a tendency to create a sand bar just below the mouth of Davis's Creek?

A. There used to be a sand bar there—quite a pronounced sand bar. I didn't notice as much of a sand bar there now as will be later, when the erosive action of the river has ceased. It takes a long time to have the bank get back to its original position, and it usually doesn't do it completely until the willows have had a chance to grow in the soil.

Q. Where the conditions are such as to create a sand bar, do you usually find a current there which would tend to wash away the bank?

A. Well, the sand at the mouth of a stream like that is usually like a delta, and we find it at the mouths of all our streams, and I have mentioned before the islands on the other side of the river were probably formed by Tyler Creek, just as Blaine's Island is formed by Kanawha Two Mile Creek; and all up the river we will find our islands usually below the mouth of a creek.

Q. Have you made a study of the character and extent of the protective work which Mr. Dickinson has put in at his property?

A. Yes, sir.

Q. Does any of that work go beyond the point of protection and into the field of improvement or beautification?

A. The upper portion of it, next to the house, is entirely as a landscape feature in connection with the house, and the fill itself is of some—it is useful to Mr. Dickinson as making a terrace in front of his house; but the manner in which his fill was made required him to make it much wider than if his riprap had been placed by boat from the river. In other words, when Mr. Dickinson started to make his fill, as is shown in his pictures, the bank was—had been eroded and was very steep, and he had to dump that—build up that bank and get a place for his bulldozer to work, and of necessity that required a larger bank; and then he had to be careful not to destroy his trees; he built big
113 brick wells around the trees in order to protect them—and his filling had to be—required a much wider bank then in order to get his rock down to the river and place it right he had to have a pretty steep bank. He builds up a steep bank on purpose so that the rock will roll down into the river. Otherwise they will stick on the slope and would not get down where he needed them.

Q. So far as the earth and rock fill is concerned, is all of that protective work or is some of that beyond mere protection?

A. Oh, I think that all of it was necessary to protect it, but then it is possible that Mr. Dickinson has widened it for his own convenience. I would say that most of it was entirely for protection work.

Q. Mr. Plumley, could adequate protective measures have been installed there prior to the raising of the pool stage and prior to the erosion at less expense than could be done after the damage was done?

A. Yes, sir.

Q. Considerably less expense?

A. Yes, sir.

Q. Have you designed a plan of protective work there which in your opinion would have afforded the Dickinson property adequate protection if installed prior to the raising of the pool and prior to the erosion and at a cost as of September 1938?

A. Yes, sir.

Q. Will you outline in more or less detail what that plan of protection consisted of?

A. Well, I used the——

Mr. Boyd. For the record I would like to note our objection. This is irrelevant because——

The Court. Ruling reserved.

A. I have used the type of riprapping which has become more or less customary in the Kanawha River on work where prominent

riprapping is required, and I took my design largely from that used by the Government at the Ordnance Plant in some riprapping which was recently done there, and also it follows generally the plan which was used on Kanawha Boulevard, except that I didn't make it as heavy. The plan is to go to the bottom of the river or to some stable point and dredge a trench, and in my case proposed dredging a trench about six feet wide and about four and one-half feet deep, which in area is one cubic yard per linear foot, and then I placed on the river bank a covering of all sizes of stone about 18 inches thick, and in Mr. Dickinson's case I ran the top of that up to elevation 580, which is shown on some of the Government plats as being the end of navigation or the
114 point where the river stage is so high that navigation ceases, and that also fits very well on Mr. Dickinson's bank and comes out about the top of his lower terrace.

By Mr. JAMES:

Q. Using the angle of the bank prior to the erosion, starting your rock toe down, I believe, about the old pool level, was it?

A. Well, it started in the river where the slope ceased in the water before the old pool stage.

Q. And extending it up to contour 580 at the slope of Dickinson's bank prior to the raising——

A. Which was about 2 to 1.

Q. That would make your riprapping how long?

A. The bank, as measured on the Government plan, is 60 feet, that is to say, measuring on the slope.

Q. That means you would have a rock toe wall six by four and one-half——

A. Six by four and one-half, and then, resting against that toe, a riprapping 60 feet up the bank. That is not quite as high as the Government used at the Ordnance plant.

Q. And you say that stone riprapping should have a thickness of about a foot and a half?

A. About a foot and a half, yes, Sometimes it is thicker than that, but my judgment is that a foot and a half is sufficient.

Q. State whether or not in your opinion a protective work of that kind would have afforded the Dickinson property adequate protection if installed prior to the raising of the pool?

A. Yes, I think it would. The trees could have been protected by placing the stone around them—I mean the shade trees—which were valuable to Mr. Dickinson.

Q. Would it have prevented all of the erosion, or substantially all of the erosion, that has taken place?

A. Yes, it would have prevented it entirely.

Q. Would your plan of preventive work there require any maintenance in the future?

A. No, not at all. After the spaces between the stones are filled with silt, the willows come in and you have got a permanent bank that will last, unless it is taken out by some accident or something of the sort will stay there forever.

Q. Mr. Plumley, would it have been practical to install protective work there by using piling instead of riprapping?

A. It would never have been permanent. I got in a boat and went all the way from the mouth of Davis Creek to the Ordnance community buildings—the Ordnance plant at South Charleston—and the people who owned the properties along that bank
115 have used piling, largely put in since 1938, and already that piling, and the strips and lagging behind it, shows signs of deterioration and in some cases it is going to have to be renewed very soon.

Q. That work was put in after the pool stage was raised?

A. Yes.

Q. On the theory that your protective work is put in prior to the raising of the pool, whether it would require maintenance or no, would it be practical to use piling?

A. No; I don't think it would.

Q. Would you explain why?

A. Well, you would have to raise up 11 or 12 feet up vertically in the bank or higher than that. You would go—you would have to raise way up to get your pile—use 30-foot pile. It could have been done, but it would have been more expensive to do it than in the manner in which I suggest.

Q. Unless you had filled completely behind that 30 foot of piling, it would have constituted an obstruction in the river?

A. Well, it could have been done without making an obstruction, but it would be a very clumsy way to do it, and there is no reason to do it that way. The only reason to use piles is because they form a temporary, quick protection which will last some eight or ten years, and if enough rock is dumped behind them will perhaps be more or less permanent; but I notice the Government never uses them where they want to riprap a bank, and it is rather unsatisfactory. I have put piles along a river bank and had the river wash them all out.

Q. At any rate, you say it would have been more expensive——

A. If you put them up on the bank that way they would have been expensive. If you put rock behind your pile, you might as well leave the pile out and put the rock in.

Q. Have you ascertained reasonably close the approximate cost of your riprapping project as of September 1938?

A. Yes.

Q. Will you state what it would have cost on 1938 cost prices?

A. I figured on the basis of quantities per linear foot. On our 60 feet of bank 1½ feet thick would be 90 cubic feet in a foot of riprap, and we had 27 cubic feet in the ditch.

Q. That is the toe wall?

A. The toe wall, which would make 117 cubic feet, or 4.33 yards per foot. My estimate contemplates a cubic yard of dredging at 75 cents, 4.33 cubic yards of rock in place at $4, a total of $18.07.

116 Q. That is per lineal foot?

A. That is per lineal foot; yes.

Q. Now, on a 411-foot river frontage there, what would be the total cost of your riprapping project?

A. $7,392.

Q. Are those costs computed as of September 22, 1938?

A. Yes.

Q. (Continuing.) As best you can?

A. That was my intention, to make a liberal estimate to take care of the costs.

Q. Mr. Plumley, you heard the testimony of Mr. Dickinson regarding the amount of improvements, that is, grading and filling and the structural improvements on his property up to September 22, 1938, did you not?

A. Yes, sir.

Q. Have you made a sufficient study of the Dickinson property, in the light of the improvements as of September 1938, to have an opinion as to its fair market value as of September 22, 1938?

A. I didn't pay any attention to the improvements that he made, because I had understood that those were made subsequent to 1938, but I made an estimate of the value of his land and figured it at $4,500 per acre, and that was based on what I understood the land to cost.

Q. Cost him?

A. Cost him, yes, without any improvements.

Q. Do you recall how much of the Dickinson river bank is flooded permanently, in area or in acreage?

A. 0.22 acres.

Q. What, in your opinion, would be a fair market value of that 0.22 acre as of September 1938?

A. It has always been a matter of great difficulty to real estate to determine what the river bank that the Government was taking has worth. It ranges between nothing and the value of the bottom land.

Q. Or top land?

A. The top land. It has in some cases great value as a supporting factor for the top land, because if you take it away and the river

erodes your land you have lost some top land. It has other value. After the Government takes it it becomes the property of the Government and you have no right to put anything in it except at your own risk. They will give you permission to erect works in it if you care to, but that is entirely at your own risk, and if the Government desires to change the pool I think it has been pretty
117 well established that they won't pay anything for what is out in their river. That is worth something; you are deprived of something. Now, it is difficult for me to say; it is difficult for anybody to say what that is worth; but I think a fair way of appraising it is to strike a mean between nothing and the value of the bank——

Q. The value of the top land?

A. The land above. I think in this case $2,250, or one-half of $4,500, would be a fair price.

Q. And that is a fair price per acre?

A. Per acre; yes.

Q. And using that acreage price, what value do you place on the 0.22 acre?

A. $495.

Q. Now, Mr. Plumley, the area between elevation 566 on the Dickinson bank and up to 574, the top of the easement area, will be, according to evidence in this case, flooded occasionally or intermittently. Are you able to give us a fair market value of a flowage easement to flood intermittently this .10 acre?

Mr. WILLIAMS. Objection. There has not been any evidence in this case yet to show that that ground will be intermittently flooded as a result of the operation of the Winfield Dam.

The COURT. It is stated in the question that that will be developed later.

Mr. JAMES. It will be further developed, but I think it is already in the record.

The COURT. I overrule the objection.

The WITNESS. Will you read the question, please, Mr. Clerk.

(The question was read.)

A. When I established my rule of one-half the value of the bottom land as being the value of the land completely taken, if the other land was not completely taken why possibly the damage would be less, and I made that one-quarter of the value of the bottom land, or, in this particular case, $1,125 per acre, or $112.50. The total is $607.50, and I approximate it at $600.

By Mr. JAMES:

Q. Mr. Plumley, you are familiar with the entire Dickinson tract there?

A. Yes, sir.

Q. And you heard Mr. Dickinson's testimony as to the improvements that had been made on that property up to September 22, 1938?

A. Yes, sir.

Q. Do you have an opinion as to the fair market value as to the entire Dickinson holdings there as of September 1938, including the improvements?

A. Including the house?

118 Q. Including all of the improvements.

A. Yes. I have forgotten Mr. Dickinson's testimony, and this is entirely on my own judgment, but he had a very expensive house, and he has graded his property very nicely, he has erected a cyclone fence around the whole place——

Q. I believe there is no testimony that that fence had been completed as of September 1938, so disregard that.

A. Of course, I don't know what was completed in 1938. I have to base my judgment on what there is there now.

Q. Wait just a minute and I will refresh your memory as to what Dickinson's testimony was as to the improvements made and completed as of September 22, 1938. Of course, he testified that he had to pay for the naked land $14,500, and that he had expended in grading and filling on the top land $6,300, and for rock or stone grading in connection with his parking lot $1,350, storm and sanitary sewers, $2,500, water and gas lines, $825, the installation of a 3,400-gallon gas tank and filling station, $525, a partially complete residence at his estimated cost of $19,000, making a total of approximately $45,000.

A. All of the things that you mention are there, and I have seen them, and I would say this would be a very reasonable price for them. Mr. Dickinson's figures for grading and his costs for grading were very low. I don't think, unless he were a contractor and had the equipment there and could do it on odd days at his own convenience, that he could ever have made the riprapping fill at the price which he mentions.

Q. Then would you say that the fair market value of his holdings in that property as of that date would be as much as his total investment there?

A. Yes, at least, and probably more.

Q. Now, Mr. Plumley, in view of the character and value of the Dickinson property, and in view of the nature and extent of the erosion that took place, state whether or not, in your judgment, the cost of a protective work or a protective project such as you have outlined which, if installed prior to the raising of the pool would have prevented all of that erosion—whether or not in your judgment that outlay or expense would have been economically justified?

A. I would think it would.

Q. You understand my question?

A. Yes, I understand your question. Mr. Dickinson spent much more than it would have cost, voluntarily, himself, in order to protect his property; and he has a very beautiful site for his house, which would have been—he went to great effort and pains
119 to save his trees; he tied them with ropes and he built great, big, expensive pits around them, and if those trees were to be taken away and he would have just a bare river bank, as has happened in some cases, particularly down—just above Withrow's everything is gone; it is just a bare bank—that would have depreciated the value of that property very much, and he was justified in spending enough money to make himself safe.

Q. Well, entirely apart from the fact that it is his home and may have some sentimental value to it, from a commercial standpoint would you say——

A. From a commercial standpoint I think it is justified, because those river lots always are more valuable than the inside lots. Mr. Dickinson's tract of land of 3.1 acres is subject to subdivision, and he could get six or eight lots to the acre. The river bank lots would be the most valuable of all the lots, and if the bank were well protected by trees that would enhance the value. Take those trees away and you reduce the value.

Q. Mr. Plumley, are you familiar with the Frank Withrow property, situate a few hundred yards downstream from the Dickinson property, which is also involved in this suit?

A. Yes, sir.

Q. Did you make the same kind of study relative to the erosion on the river bank of the Withrow property that you made in connection with the Dickinson property?

A. Yes, sir; except that I didn't take any cross section over it. No filling has been done; no riprapping has been done, and the river bank shows in its natural state.

Q. Will you state, if you know, what caused the erosion of the river banks at the Withrow property?

A. As I stated in the case of Dickinson, I believe it was the raising of the water in the pool.

Q. What are your reasons for believing that to be true?

A. Well, the thing that contributed to it to a large extent was the cutting of all of the vegetation between the old pool level and elevation 574. When that was done it left a bare, unprotected river bank; and the water was raised successively, by stages; it didn't all come up at once; and each time the wave action eroded the bank below 574, and that erosion was caused by the saturation of the sandy clay soil, and the equilibrium of the bank was dis-

turbed by the changing of the water line. The river had become used to the water line as it was on the old pool, and when you change it and when you take away the vegetation, then you have an entirely new set of facts.

Q. Does the soil become much softer after it is saturated?

A. Yes, the soil in the bed of the river is usually of an
120 entirely different character than the soil above the water line. The water washes the vegetation out of it and it becomes pretty firm sand down in the river. Of course, there is always a little mud on top of the river, particularly if the current is not swift, but you get a different kind of soil. Now, above the water line the water washes the silt out of the soil, and the action of the waves washes that out until you have a beach, and then it erodes back. That beach at Withrow's in places is back ten or twelve feet. Well then, the land above is unsupported and usually stands up at an angle of approximately 1¼ to ⅛ to 1—stands up right straight. Your beach cuts in and this ground is gone—slides out into the river. Then this bank gradually caves in until you have a slope of 2 to 1.

Q. Mr. Plumley, you heard Mr. Withrow's testimony about the number of trees and the amount of the bank that had already washed into the river?

A. Yes.

Q. State whether or not that erosion is continuing now?

A. Yes, it is. If something is not done to protect that bank, all of the trees on top of the bank will topple over and there will be no trees at all, and the erosion will continue out for ten or fifteen feet further than it is now.

Q. That would take in all of the river bank and part of the street?

A. All of the river bank and possibly as much as half of the street. Now, right above Mr. Dickinson's, right at the end of the street, that is taking place now. It is being very badly eroded.

Q. You mean Mr. Withrow's?

A. Mr. Withrow's, yes, sir; I beg your pardon.

Q. Where is the channel or the current of the river immediately opposite the Withrow property?

A. I didn't make any soundings opposite the Withrow property, but I would judge that the channel was closer to Withrow's than it was to Dickinson's.

Q. Do you know whether or not that current or channel has changed or shifted any since the construction of the Winfield Dam?

A. I would not see any reason why it should shift. I see no evidence of any shifting.

Q. Have you made a similar study of protective work which, in your opinion, would have afforded adequate protection to the Withrow property if installed prior to the raising of the pool?

A. Yes, sir.

121. Q. Will you give us in detail what that protective work amounts to and includes?

A. I have used a similar type of riprapping, but in Mr. Withrow's case the trees are much heavier—the vegetation is much heavier than at Mr. Dickinson's— and I am advised that the bottom is much firmer, more of a rock bottom there than at Dickinson's where it was quite sandy; and for that reason I didn't think it was necessary to go quite as deep or to run the riprap protection as high on the bank. I used the same toe wall of a yard per linear foot, but did not extend the riprapping up quite so high. I used 40 feet instead of 60.

Q. That is 40 feet on a slope?

A. Yes, sir; which puts the riprap close to 574. In other words, I did not run it out to 580, as I had above.

Q. Did you compute the cost of that per linear foot on the basis of September 1938 costs?

A. Yes, that figures out on the same basis at about $13 per foot, and at 180 feet at $13, the price would be $2,340.

Q. That is for the entire riprapping job?

A. That is for the entire riprapping job, yes.

Q. You mean $2,340?

A. $2,340; yes.

Q. Would piling have been practical here for protective measures to be installed prior to the raising of the pool?

Q. I think piling is only temporary bank protection; it requires maintenance, and is unsatisfactory.

Q. Whether temporary or not, would it have cost as much or more than your riprapping project?

A. In the long run it would; yes, sir.

Q. You are familiar with the dimensions of the Withrow property?

A. Yes, sir.

Q. There is testimony to the effect that 0.11 acre of the river bank of the Withrow property will be permanently flooded. Will you state what, in your opinion, was the fair market value of that 0.11 acre of the river bank as of September 22, 1938?

A. Yes, sir; I based my values on a front footage value of $30 a foot for the Withrow property, and I took that—his lots are approximately, I think, 180 feet deep, and I allowed for half of a ten-foot alley, and I allowed for the whole street in front of it, and putting that into acres I got the whole tract as being worth—

these seven lots $5,250; and getting it into acres, it ran the value up to $5,400 per acre. On my same formula of using half the value for the land taken, that would make the 0.11 acre
122 of the land below 566 at $2,700 an acre, would be worth $297; and the 0.04 acre——

Q. The 0.04 acre is the area, which, according to the evidence, would be flooded intermittently. Will you give us what, in your opinion, would be a fair market value of the flowage easement to flood intermittently this 0.04 acre as of September 22, 1938?

A. I place that value at $5,400. That makes a total of $351, or $350, in round numbers.

Q. Mr. Plumley, did you hear Mr. Withrow's testimony regarding the improvements upon his entire holdings prior to September 1938, namely, two houses and two garages?

A. Yes, sir.

Q. You are familiar with his entire holdings there, are you?

A. Yes, sir.

Q. What, in your opinion, would be a fair market value of his entire holdings there as of September 1938?

A. I would say in the neighborhood of $15,000. I don't recall Mr. Withrow's testimony in detail, but on my own judgment—he has quite a nice place there.

Q. In view of the character and value of his property as of September 1938, and in view of the nature and extent of erosion that has gone on on his river bank, state whether or not, in your opinion, the cost of the protective work which you have outlined would have been economically justified?

A. I think it would.

Mr. JAMES. That is all, unless I have inadvertently omitted something.

Cross-examination by Mr. DYER:

Q. Mr. Plumley, did you see the river bank on the Dickinson property after the brush was cut off, as you have stated, and before the water was elevated thereon?

A. No; I never saw the river bank on the Dickinson property until the fill was made. That is to say, I have passed by there and have seen it generally, but I didn't make a study of it.

Q. Then what you have testified as to cutting the brush off was from hearsay testimony?

A. Well, I know generally that the Government cut the brush all along the river when they raised the pool. Now I recall it, you bring it to my attention, Mr. Dickinson, I believe, prevented the Government from going on and cutting his brush and trees. I had forgotten that. But as a general proposition——

Q. I asked you if you know of your own personal knowledge—if you saw this yourself?

A. No; I never saw the property in detail until the last month or two.

123 Q. Do you know where the top of the bank was before Mr. Dickinson made any improvements on his property in the way of excavations?

A. Yes.

Q. How was it with reference to where the top of the bank is at the present time?

A. It has not changed much, the top of the bank.

Q. Has not been extended toward the river any?

A. No. You can determine that by the trees; the trees are there. Dickinson has built a terrace below the top of the bank on which he used the bulldozer to get in his riprap, but the original top of the bank is not far from where it was originally.

Q. I believe you said you made a careful study of the map which has been filed in evidence by the Government?

A. Yes.

Q. You don't mean to say that the cause of the erosion of the Dickinson property was caused by cutting the timber off, do you?

A. Well, if the timber wasn't cut there must have been a further cause for the erosion. The erosion took place, and it took place more seriously on Dickinson's property than it did in some other places.

Q. Do high tides have anything to do with erosion?

A. High tides have some effect on it, but it is not the prime cause. If your bank is settled, as it was at Dickinson's, the high water would not affect it, because we have high water right straight along on many of our banks and have had for years, and if they have come to—if they have flattened out, or unless there is an extreme l[illegible] the river, where the current is forced against the bank, the [illegible]ater doesn't affect it at all.

Q. Isn't it a fact that you usually have slips and slides after the high water?

A. Yes; that will be the thing that levels it out. Your erosion cuts in at the bank and the bank falls out and your land recedes almost vertically. Then your high tide comes along and the whole thing topples over, until you get a stabilized slope.

Q. But isn't the erosion to a certain extent where the current of the water comes against the bank?

A. The current is more produced by the wind and the wave action. Our pool most of the time, Mr. Dyer, is perfectly level; we have a lake. When these big tow boats go by, we have waves, and those waves lap against the bank, and then in times of storm

we have a good deal of waves from wind; and it is wave action that starts erosion, that and the saturated condition of the bank underneath. At your old bank you had a natural toe
124 which had occurred through the years. You have taken that away from that and moved your water and upset the stability of the bank.

Q. Then winds assist in erosion also, as well as cutting the vegetation?

A. Wind and wave action.

Q. Yes.

A. But that wind and wave action does not affect matters after the bank has become stable.

Q. Do you know what effect the big flood of October 1937 had on the banks along the Kanawha River?

A. Yes; I suspect that the flood also caused some softening and slipping of the banks.

Q. The flood softens it from the river side, and the heavy rains and so forth from the top contribute to the breaking down?

A. Yes; there is more or less channeling from the rains in any exposed and unprotected bank.

Q. Then the question of cutting the vegetation doesn't have anything to do with it other than by the strengthening of the soil by the roots that go in?

A. Well, the vegetation strengthens the soil and absorbs some of the water and acts as a protective measure. Wherever your willows grow in tight you do not have any more trouble with your bank. I have watched this river for years, and I have watched the weather, and had a good deal of experience with slides, and had to maintain railroads in Kanawha County.

Q. I am not questioning your qualifications at all.

A. It is the same old stuff, though. I have noticed right markedly that we have had more eroding and slipping of the banks on Kanawha River since the pool was raised than I ever noticed prior to that time.

Q. You have observed the bank on the north side of the river, haven't you, opposite the Dickinson and Withrow property?

A. Yes; you can't see the bank on the north side of the river. There is nothing there but a low island, just a few feet above the water.

Q. Where is the island?

A. It is directly opposite Dickinson, and the lower end opposite Withrow.

Q. Is the island covered with water?

A. No, the island hasn't much of a bank; the banks are flat on that side.

125 Q. Isn't the island above Davis Creek?

A. Below Davis Creek. Oh, there is another island above Davis Creek, but there is an island directly across from Dickinson's at the mouth of Davis Creek, and it extends down to opposite Withrow's.

Q. What caused that island?

A. I think that the cause of that island was the drift out of Tyler Creek.

Q. I don't understand——

A. I have observed that all of the islands that we have, or most of the islands that we have in Kanawha River, are found just below the mouths of creeks; and I remember in studying Blaine's Island there was a great deal of speculation as to what caused that island, and we decided that the island was caused by the opening of the valley at Tyler Creek—at Kanawha Two Mile Creek—and now this island is just below Tyler Creek.

Q. You say "we decided." You mean discussing it with other persons?

A. Well, discussing it with Stone & Webster's Engineers from Boston. I had some of the best experts in the United States assisting me on that.

Q. Does any creek or run come in on the island opposite Dickinson?

A. That is below Tyler Creek.

Q. Isn't it a fact that islands are caused from sediment when the break in the ground falls down and breaks up?

A. That will make sand bars sometimes. It is very clear in my mind—as I say, I have had some opportunity to consider and discuss the matter—that these islands were established by perhaps some prehistoric Cabin Creek flood that made deposits at the mouths of the creeks like deltas, just like the delta at the mouth of the Mississippi.

Q. Your sand bars grow up into Islands, don't they? Isn't that the way the island first starts, sand bars?

A. I have never been present at a start of an island of that kind.

Q. Neither have I.

A. I know the swimming hole gets cluttered up sometimes.

Q. The bank on the north side of the river is more sloping?

A. Yes; much flatter.

Q. Than it is on the south side of the river?

A. Yes, it is a flatter bank. Where the bank is steep on the north side of the river the same think is occurring.

Q. In your opinion, why is the bank on the north side of the river so much flatter than that on the southern?

126 A. I don't think it is. It just happens at that place you look at an island you don't see the bank at all. Right back of that island there was considerable erosion at one time.

Q. You take from Charleston clear down on the Kanawha River on the north side, isn't the bank all the way down much lower and more reposed than the southern side?

A. Which side of the river do you travel on usually?

Q. I travel on both sides, but I am asking you about the north side.

A. I have driven along the river—I have been on both sides. It doesn't make any difference. You will notice that on the Kanawha River between here and Point Pleasant that sometimes the river is up against the hill, and then wide bottoms on the other side, and then sometimes the wide bottoms are on your side, and it is steep, and the river winds down through the bottom, and there is no particular difference in the banks. You may strike some place where it looks flatter or steeper, but on the average they are about the same. Right across from Mr. Dickinson's it looks very flat, and that is on account of the islands.

Q. The bank of the river builds up on the side on which you have less current than the other side; isn't that true?

A. Not always. Do you mean to say that there is more erosion on the side where the river cuts?

Q. Yes.

A. That is true, but opposite Dickinson, that is where the current is and the floods, and that may have something to do with your island. The trash gathers on islands; it is thrown up there by the floods; and that gathers sand.

Q. Then the current running against the bank along the Dickinson and Withrow property has a tendency to make it perpendicular and steep down instead of a gentle slope; isn't that true?

A. I don't think so in that case. I have never seen any evidence of any heavy current at that place. Now, down below Mr. Withrow's I think the current gets on his side, but we are not on the outside of the curve there at Mr. Dickinson's.

Q. You have just stated that it comes in down at the toe and cuts at the toe. Do you mean that the water does that or the current would cut the toe out?

A. It is the wave action that does it, the waves from the boats.

Q. Won't the wave cut it faster with a current?

A. If you had a heavy current it would cut out, but there is no evidence of that. There are places on the Kanawha River,
127 and I know about them, where you can hardly keep the bank protected even with riprap. There is such a place at the lower end of the Boulevard. The banks always cut there,

because we happen to get a heavy current right at that place. I used to own some land right in there.

Q. What effect did the pool have upon the current in the Kanawha River, the operation of the Winfield Dam—what effect did it have upon the current?

A. You practically have a pool stage at all ordinary times. That raises up and down. I have been down to Mr. Dickinson's frequently in the last month, and I have called the U. S. G. S. office and gotten their reading on their automatic gauge, so I knew exactly what the pool was at Lock 6, and there has been very little difference in that time. The pool is about the same.

Q. It slows up the current, doesn't it, except when the river is in the condition of open river and the rollers are up?

A. Yes; there is not very much current at pool stage.

Q. Doesn't it have a tendency to have sediment and sand and so forth collect, instead of being washed on down?

A. In the bottom of the river; yes. However, that river seems to be very, very constant.

Q. And along the banks, too, won't it have a tendency to cause a deposit more or less?

A. Well, if you have complete slack water it will deposit sand. We have current, however; we do not have complete slack water. There is a slope in the river—I found that there was a slope of about a foot, I think, when the lock master at Winfield—I got his elevation and got the U. S. G. S. and found there was a slope of about a foot.

Q. You say the angle of repose at the Dickinson property was about 1½ to 1?

A. No, I said 2 to 1. I said that is the general angle of repose for sandy clay soil.

Q. And you usually prevent erosion by 1½ to 1?

A. No; I didn't say anything like that at all. You prevent erosion by putting in something which will protect the bank.

Q. Well, what angle of repose is a proper angle—

A. With riprap you can put it anywhere from 1½ to 1 to 2 to 1, and it was my intention just to put it on the river bank as it was; it was fairly uniform.

Q. In your estimate of the riprapping, what angle of repose did you figure on at the Dickinson property?

A. I took the Government section, the one that is shown on this map which the Government said is the typical section, and used that, which is about 2 to 1.

128 Q. I mean this, Mr. Plumley, what angle of repose did you have, or would it be, when you had completed it according to your figures?

A. Around about 1¾ to 2 to 1, depending on what the bank was at that place. I didn't make the thing uniform; I followed the bank, so as to save the expense of grading it.

Q. The angle of repose before that, you say, is about 2——

A. The angle of repose of the natural soil is 2 to 1. You can build up a stone wall on that at a steeper angle, but the riprapping would follow the natural bank. The natural bank there at both places was originally between 1¾ and 2 to 1.

Q. You would have a better angle of repose with your specifications than you had before the water was elevated on the bank?

A. Well, I took the river bank as it was.

Q. Well, you have given your figures. The difference between 1½ to 2 would be a better angle, wouldn't it?

A. Well, you don't want to put yourself hard and fast on any slope. The bank itself is not the same.

Q. I am asking you, as an expert, with what you figured, there you have a better angle of repose than you had before the water was elevated there?

A. I don't quite understand.

Mr. JAMES. Wait just a minute. You are twisting his words.

The COURT. He said he got the same angle; with his estimate he followed the river bank just as it was.

Mr. DYER. I am asking him if that wouldn't give him a better angle of repose.

The WITNESS. You seem to be very much confused, and you are trying to confuse me.

Mr. DYER. No; I am not trying to confuse you at all; I think I am the one that is confused. What I want to know is whether you would have got a better angle of repose if you had put in the riprapping according to your estimate?

A. No; the angle would have been the same.

Q. You did not take into consideration any wells around the trees?

A. No; because I just piled the rocks around the trees.

Q. Then all that labor of putting the wells around the trees wasn't necessary?

A. Well, you had a derrick and you had rocks and you piled rocks down so as not to injure the trees.

Mr. JAMES. May I interrupt? I think it is clear that wells around the trees are no part of our claim in this suit, and
129 whether they were necessary or unnecessary it seems to me is irrelevant.

The WITNESS. My mention of wells around the trees was to show the care Mr. Dickinson took in protecting his trees.

By Mr. DYER:

Q. Did you take that into consideration in fixing the value of the property and improvements?

A. I made the price high enough to cover anything you would do to the trees.

Q. And you say it is very liberal?

A. Yes; it is a liberal price.

Mr. JAMES. You two gentlemen misunderstand each other. You are talking about the price of the property, Mr. Plumley is talking about the cost of the protection. I think you had better repeat your question.

Mr. DYER. I asked him if he did not take into consideration the cost of these wells built around the trees as fixing the value of the improvements.

A. No, I paid no attention to that at all. I understood—I was informed that Mr. Dickinson paid $14,500 for his land, and I divided that by the area of the land, and it gave me approximately $4,500 per acre, and I based all my figures on that. Mr. Dickinson I believe testified that it cost him $5,000 an acre, but I did not do that. I used $4,500 an acre as my basis for figuring the land values; and I know something about that land——

Q. Then you did testify, did you, that his total investment, as stated by Mr. Dickinson, was $45,000?

A. Something like that, yes. Now, that includes everything that was done before the date mentioned.

Q. Fixing the value of the property which has been taken, which amounts to $2,200 for the flooded part and for the easement area, did you take into consideration any improvements that had been placed on the property?

A. None whatever.

Q. It is on the original cost of $14,500?

A. Just on the original cost of what he bought it at.

Q. What was that?

A. $4,500 an acre, $14,500 for 3.1 acres, and I think it runs about $4,500. I made it in round figures. It really runs more than that. It runs about $4,700 an acre.

Q. What angle is that fill now made in there by Mr. Dickinson?

A. What angle?

130 Q. Yes.

A. It stands about a little sharper than 1½ to 1. Mr. Dickinson is trying to get it to stand sharper than that, so as to be able to roll some big rocks down and get some more raprapping. In other words, if you level the bank too flat the rocks will stick on it, and he is deliberately trying to get a scharp bank so as to get the rocks down about water level.

Q. Then you say it is 1½ to 1 now?
A. It is a little sharper than 1½ to 1 now.
Q. Would it be as much as 2 to 1?
A. No.

By the COURT:

Q. Being sharper than 1½ to 1 would be something like 1¼ to 1?
A. 1¼ to 1; yes.

By Mr. DYER:

Q. How much of the 0.22 acre below contour 566 is now covered with water since the fill has been put in there?
A. I don't know.
Q. Now let's go to the value of the Withrow property. You say that 0.11 acre, you figured that at $5,000 per acre. Maybe I misunderstood you, but you figured the street in with that acreage, and the driveway?
A. Yes, sir; the street is a part of the subdivision. I am accustomed to laying off subdivisions.
Q. Do you know in whom the title to the driveway is?
A. Under our statute I think the title is in the public. It has just been recorded. I don't think it is even dedicated, other than the recording of the map, which is a dedication.
Q. Isn't it a fact that the title was retained by the Gebhart Company when it conveyed it?
A. I never went into the title.
Q. Then, if that is true, you have taken into consideration the value of property which does not belong to Mr. Withrow?
A. Well, there is a map of record. I have seen the record map which shows a street called River Street in front of Mr. Dickinson's property.
Mr. JAMES. Withrow's.
The WITNESS. Mr. Withrow's property. I beg your pardon.

By Mr. DYER:

Q. And you did value that in fixing this other?
A. Yes; that reduced the value of the acreage, rather than increased it.
Q. How much is that River Drive tract of 0.27 acre worth?
A. Repeat the question, please.
A. Repeat the question, please.
131 Q. How much is the River tract, containing 0.27 acre, not including the River Drive—what is it worth?
A. How much is the river bank?
Q. That's right, the river bank. I believe it shows it contains 0.27 acre by the maps filed.

A. Well, that is all on the bank. I just don't understand your question.

Q. Have you a map there?

A. No, I have not.

(The Court hands the witness a map.)

The COURT. The witness has a map now.

By Mr. DYER:

Q. You see the River Drive on there?

A. Yes.

Q. That is 50 feet wide, isn't it?

A. It says 50 feet here; it doesn't say 50 feet on the record map.

Q. I say, the map states 50 feet?

A. Yes, this map states 50 feet.

Q. I want to know the value of that part of the bank—what is known as the bank tract—from River Drive down to contour 554.65?

A. I never saw that bank before the erosion took place, but I believe that there was very much more bank there then than there is now; it has been eroded away; but I would say that that river bank was right valuable to the whole property, and I have already stated that the land down at the foot of the river is worth one-half of the bottom land; and I would say that this bank itself would have something of that sort—from one-half to three-quarters of the value of the bottom land. Take the river bank away and you take the trees away and you destroy much of the value of Mr. Dickinson's property.

Q. Can you fix a value on it?

A. Well, I said the other was $5,400. I should say that this would be in the neighborhood of $3,500 an acre, that stuff at the top.

Q. Well, in fixing the $5,400 before you included the piece of bank in the River Drive, didn't you?

A. I included the street, yes.

Q. And you think that would be worth more than the top of the bank would?

A. Well, I should say that the bank would probably, according to the theory I have evolved for the valuation of the other, it would be worth $5,400 at the top of the bank per acre; and down to zero at the bottom of the bank. That is not
132 well stated, Mr. Clerk. It would vary between $5,400 and nothing, and I placed the value of the land taken as one-half

of the value of the bottom. I should say the top of the bank is right valuable, Mr. Dyer, probably more so than down lower.

Q. I believe you also stated that in your opinion the angle of repose would stop near the center of River Drive?

A. Yes.

Q. Then you also put a value on the entire holdings of Mr. Withrow of $15,000?

A. That is very approximate, but that is about it. He has got two nice houses and very nice land. It is deep, and he has access from the rear from an alley and he has access alongside his house from a paved street.

Q. The erosion is in no way going to affect the houses, or property over there physically?

A. You had the street between the lots, but the street is part of the lots, no matter how the title is held or what reservation the grantor may have made. He sold Mr. Withrow some lots facing on a street, and Mr. Withrow has an interest in that street which no one can take away from him.

Q. He would only have a right in there so far as access was concerned, wouldn't he?

A. Yes; but you can't take the street away without taking part of that property.

Q. Then he has access from Kanawha Street, I believe you stated yesterday?

A. Well, it is convenient for him to use that access, but that hasn't anything to do with the street in front of his property, which was plotted there and put on record.

Q. I believe, Mr. Plumley, you testified the riprapping as of September 1938, that is, the cost. You had reference to the cost at the time the land was taken?

A. Yes.

Q. Now, state whether or not that estimate made by you represents your opinion of the reasonable cost of doing the work at that time?

A. Well, that is an estimate—an engineer's estimate—made liberal enough to take in all the incidental expense and was figured on the basis of that time. If you did it now it would cost very much more. I am advised that the Government has had some work done at the community which was much more expensive than this—recently done.

Q. Then your estimate in connection with the Withrow property was made the same way?

A. Yes.

133 Redirect examination by Mr. JAMES:

Q. Have you made a close examination of the Government's map which was introduced in the case of the Dickinson property on yesterday?

Mr. DYER. I think he stated that he did.

A. Yes, sir; I had a photostat made of this map and used it in my calculations.

By Mr. JAMES:

Q. Did you find that map correct insofar as it locates the Dickinson house with reference to the river bank?

A. No, I did not. I found that the map was more general as to the detail of the topography—more of a picture than a good map, which caused me a lot of trouble. I had to survey the whole tract and spent a lot of time down there trying to find out what was wrong, and I found after making a detailed survey and putting back some points which had been destroyed that the house was erroneously located on this map as being closer to the river than it actually is.

Q. How much closer to the river does that map indicate the house is than the correct location of the house?

A. About ten feet.

Q. Have you seen an earlier map made by the Government engineers which also locates the house?

A. Yes, I have.

Q. Does the earlier map made by the U. S. Engineers office correctly locate the house with reference to the river bank?

A. Yes; it is more nearly accurate than this one. It has a very odd error on it, however, in elevations, which caused me some trouble. It shows the floor elevation of the first floor as elevation 590, and it shows the elevation of the second floor as 596.5, or only 6½ feet between the two floors when as a matter of fact it is some 8 feet.

Q. Well, purely with reference to the location of the house on the river bank, do you find that the earlier map is substantially correct in that respect?

A. Yes, sir; it is evident on examining the two maps, the iron pin which is shown on each of the two maps is much closer to the end of the house on the earlier map than it is on the later map, and I found that the actual location more nearly corresponded with the earlier map than with the later map. I don't think that there is any—just some draftsman made an error; it is not a serious matter except it caused me a lot of time to find out what it was.

Q. The only error, then, of consequence is the matter of
134 locating the house about ten feet closer to the river than it actually is?

A. Yes; if someone looks at this later map and tries to judge where the house is with respect to the top of the bank, they may be in error.

Q. Now, Mr. Plumley, one other question, passing now to the Withrow property. In placing your over-all market value of the entire Withrow holdings there, did you regard the area within River Drive as shown by the map as owned entirely by Withrow, or did you consider it just his interest as an abutting property owner on that 50-foot strip?

A. Well, I considered that he had a predominant interest in that strip, because he owns land all around it.

Q. Did you consider his owning it in fee?

A. No; he doesn't own it in fee.

Q. And in fixing your value, did you——

A. No, I didn't fix that; just that it has a very great relation to the value of the property, because it is there, and it is a beautiful lawn, and it adds very much to his property.

Q. Did you take into consideration the prospects or lack of prospects of its being paved and thrown open to public use?

A. It doesn't seem to me that if Mr. Withrow objects that anyone will ever pave that. Cities don't pave property on a dead end street with no voters at the end of the street, unless some effort is made to get them to pave it.

Q. I understand that, and you took those factors into consideration in placing your over-all value?

A. Yes, I did. If that street were not there the property would not be worth as much; it would be a cheap grade of property. That is the $30 a foot on which I placed my valuation.

Q. Will you repeat that again?

A. If that street were not there you would have much less valuable property.

Q. You mean River Drive?

A. River Drive.

Q. Now, Mr. Plumley, will you state whether or not, in your opinion, the river bank part of the Withrow property and the lots on which the two houses are constructed are being used and enjoyed for a unitary purpose or for different purposes?

A. All one purpose.

Q. That is, the river bank——

A. The street and river bank is lawn, and is taken care of by Mr. Withrow just as if he owned it, and it is very attractive.

135 Q. Is it practicable to make use, or was it practicable to make use, of the river bank property entirely separate and apart from the other lots for residential purposes?

A. No; it wasn't big enough to build houses on. It is too narrow.

Re-cross-examination by Mr. DYER:

Q. The city of South Charleston or Spring Hill, the corporation, could come in and pave that and utilize it at any time they wanted to, couldn't they?

A. I don't understand you.

Q. Couldn't the municipality come in and pave River Drive and utilize it for the public at any time it wanted to?

A. Yes; but where is the public? Mr. Withrow owns a five-foot strip at the end of that street, and at the end of the street are some houses. Kanawha Street as it shows on the map does not run through, so it is a dead end street, as a practical matter, and while the city might have the legal right to pave, it is ridiculous to think that they would pave.

Q. You were valuing it as of September 22, 1938?

A. Yes.

Mr. DYER. Before I proceed further in the cross-examination, your Honor, I would like to move that the testimony, so far as it is a contradiction of the map which they filed in regard to the Dickinson house, be stricken. This map was filed by them in evidence, and I think it comes in for all purposes, and I don't think they can contradict it.

The COURT. Do you mean to say that even though there is an erroneous location of the house on there you expect to hold them to it?

Mr. DYER. No; not that, but I am going on the theory that you assume that it is correct when they put it in.

The COURT. I will overrule the motion.

By Mr. DYER:

Q. Mr. Plumley, did you make the drawings for the riprapping for Mr. Dickinson which was filed with the Secretary of War for the purpose of getting the permit to do the work?

A. No, sir.

Q. Have you seen them?

A. Yes, sir; I have seen them.

Q. I want to ask you if that copy doesn't show the river bank running through a part of the house?

A. Yes; it does, but that is rather a ridiculous situation, because the part of the house it shows is down below the top of the river bank some eight feet, and naturally it would show further
136 out, and that is just a diagram just to show generally what the situation as far as his river bank is concerned and as far as what he contemplated doing in the river.

Q. Then Mr. Dickinson made the mistake himself as well as the Government?

A. No, sir; it is the lawyers who made the mistake in raising an issue which is ridiculous.

Q. You say the lawyers made the map?

A. The lawyers reading the map, and they don't seem to know how to read it.

Mr. DYER. That is all.

By the COURT:

Q. Mr. Plumley, you testified about the estimated price of putting in some riprapping as it might have been put in at the time or prior to the raising of the water level by the Government improvement. What I want to find out is, would that riprapping have been necessary in the absence of the raising of the water level? Suppose the Government had never raised the water level; suppose that nobody had ever raised the water level, would that riprapping still have been necessary to protect the bank?

A. I don't think it would. I didn't see that bank—that particular bank—but as a general proposition we don't riprap unless we have to, and that was not a steep bank; it is rather flat; it seemed to have reached its stability; and the character of the trees on the upper part of the bank is very good about Mr. Dickinson's house—good, firm trees.

Q. Would the answer be the same as to the Withrow property?

A. Yes, sir; and the Withrow property had even heavier trees.

Q. If I understand you, then, according to your best knowledge of the situation of that river bank prior to the raising of the water, there wasn't any necessity of putting any riprap in to protect it; it was naturally protected. Is that it?

A. That is it exactly.

The COURT: Any further questions?

By Mr. DYER:

Q. I might ask him when he had seen that bank prior to the time the water was elevated?

A. No; I said I had not seen that bank in detail. I have been down there; I know that property very well; I have known it for years; but I had not looked at the bank particularly.

Q. You hadn't made any special study as to whether it required riprapping or not?

137 A. Well, I have looked at the bank below it, and when the trees are very heavy the banks are not as badly eroded as where the trees are not so heavy. I know the general situation of that bank; I made surveys down there twenty-five years ago, and I have known it off and on—I made a survey near there in 1938, and went down to the river, but not on this particular bank.

(Witness stands aside.)

(Whereupon, at 11:55 o'clock a. m., a recess was taken until 2:00 o'clock p. m.)

AFTER RECESS

GARDINER S. PLUMLEY recalled by the plaintiffs, testified as follows:

Direct examination by Mr. JAMES:

Q. I have two omitted questions. Mr. Plumley, just before we recessed for lunch, pursuant to a question propounded, you stated that a map that had been furnished Dickinson and introduced in this case was erroneous in the location of the house, and I understand that you made some such statement as that it made no difference, or was unimportant. Did you have reference to the map, or to the fact of the location of the house being unimportant?

A. Well, my statement—I really should correct myself, because it is important, and my statement was rather a desire on my part not to cast reflections on the U. S. Corps of Engineers, for whom I have great respect. The error was very important, inasmuch as it showed the house on the map that we have been using as closer to the river bank than it really is. The house is well back on the bank, and in front of it are some trees that have been there for perhaps twenty-five to forty years. You can see the old river bank just above the house on property adjacent to that in this case, but adjoining it, and Mr. Dickinson has bought some of that property and has excavated some of it, and you can see from that original bank where it was at the house, so that the house is well back on the bank and on a secure foundation.

Q. You did not, then, mean to suggest that it would make no difference whether the house was ten feet closer to the river or not?

A. No; I did not mean to state that at all.

Q. Mr. Plumley, do you know who constructed—who was the contractor who built the Winfield Dam?

A. Yes, sir.

Q. Who was?

A. The Dravo Company, Pittsburgh.

1384 Q. Do you know when that dam was officially completed and put into operation?

A. I have been advised through the Dravo Company that the Winfield Dam was completed and officially accepted on August 20, 1937.

Cross-examination by Mr. DYER:

Q. Have you been in the house, Mr. Plumley?

A. Yes, sir.

Q. Does it have a basement?
A. Yes, sir.
Q. What about the basement level?
A. Well, the basement level is the one we have been discussing. Part of the house, the westerly end of it, is one story; the main part of the house, which is the part that you pointed out as extending out over the bank, has a basement—a finished basement.
Q. And you can enter that basement from the river side from a door right in from the terrace from the ground, is that right?
A. Yes, sir.
Q. Then there is no ground from the basement part—in other words, a part of the bank from the river was cut off so you could go in the basement without going downstairs, is that right?
A. Yes, there is an outside stairway that comes down from the deck down to the basement that is on the level of the basement.
Q. Then it was built on high ground——
A. The basement end of it was excavated about eight feet on the basement end of the house to the level of the basement.
Q. Do you know what was done with that dirt from that basement?
A. No; I don't know what was done with it. I assume it was used and spread out. There wasn't very much of it. The ground generally along Mr. Dickinson's river front shows that the ground has been cut down behind the bank towards the road. In other words, the lot was graded down and the material was put over the lot.
(Witness stands aside.)

T. G. KEENEY called as a witness for the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. State your name, please?
A. T. G. Keeney.
Q. How old are you, Mr. Keeney?
139 A. Seventy years old.
Q. Where do you live?
A. I live at Witcher. Diamond is my post office.
Q. Kanawha County?
A. Yes, sir.
Q. What is your business, Mr. Keeney?
A. I am a contractor on the river.
Q. How long have you been engaged in that business?
A. Well, for about forty years.
Q. Forty years?
A. Uh-huh.

Q. During your forty years as a river contractor, has your work been limited to the Kanawha River in West Virginia?

A. Yes, sir.

Q. How far up and how far down on the Kanawha River?

A. Lock 11 to the head of navigation, up as far as Alloy.

Q. Has a large part of your river contracting work had to do with river bank protection?

A. Quite a bit of it; yes.

Q. Did you ever operate a boat on the Kanawha River?

A. Yes; I operated the Government snagboat on Kanawha River for about seven years during that time.

Q. What is a snag boat?

A. It is a boat the Government has taking snags and obstructions out of the river—out of the channel.

Q. Were you the captain of that boat?

A. I was.

Q. How much crew did you have—how many in your crew?

A. Had about eight men besides cooks—two cooks and myself.

Q. Did you ever have anything to do with the operation of the first locks and dams on the Kanawha River?

A. Yes; I worked five years on Lock No. 5, assistant lock master.

Q. For how long?

A. Well, five years. Well, I was only assistant lock master about three years; I was the lock man for two years, and then I was appointed Lock Master under Mr. Scott.

Q. Would you say that you are fairly familiar with the Kanawha River from Charleston as far down as Winfield?

A. Yes, sir.

Q. And have been for how many years?

A. Well, ever since 1910, anyhow. In 1910 I took charge of the Government snag boat, and then I was from one end of the river to the other all during that seven years.

140 Q. Have you been familiar with the condition of the river banks on both sides?

A. Yes, sir.

Q. From Charleston down as far as Winfield?

A. Yes, sir.

Q. Mr. Keeney, have you made a study of the W. M. Dickinson property at South Charleston involved in this suit?

A. Yes, sir, I looked over it; I have not made a thorough study of it, but I have looked over it and noted the condition of it.

Q. Were you familiar with the condition of that bank generally before the Winfield Dam was constructed?

A. Yes, sir; that is especially around about 1912 and 1917.

Q. Have you seen what has happened there in the nature of erosion since the construction of the Winfield Dam?

A. Yes, sir.

Q. Can you tell us what caused that erosion?

A. From the raising of the water, yes, sir; by the Winfield Dam, and saturation of the soil.

Q. Will you elaborate a bit on how the raising of the water brought about that erosion?

A. Well, of course, it put the water up on the soil that hadn't never been affected by water before, which would be a soft soil, and the waves, from steamboats, and the wind waves, this water being standing there continually, would cause the bank to wash under and the top to go over.

Q. Do you know whether or not there was any appreciable erosion on Dickinson's property prior to the raising of the pool stage?

A. Well, no, not to my knowledge. Now, as I was telling you, when I ran the Government snag boat there was quite a sand bar in there; I burned a lot of snags on it at one time and I burned up an old barge on it, and there was quite a sand bar in there clear down to the old ice piers that belonged to the Black Band Coal Company.

Q. Was there any appreciable erosion along the river banks generally within the Winfield Pool prior to the time the Winfield dam was built and the stage raised?

A. Not as I know of; no, sir.

Q. In time of high water have you ever noticed where trees and debris would be deposited on the river bank in the neighborhood of the Dickinson property?

A. Yes, sir; I have noticed it; it wasn't deposited on the Dickinson side; it was over on what we call the Wilson's Island.

141 Q. Wilson Island?

A. Yes, sir; barges, houses and all kinds of drift landed on there. I was there at Lock 6 in 1916 when the Cabin Creek flood came out and North Carolina flood came; all those barges and houses and things landed on that island there, where they didn't have water enough to take them over.

Q. Do you recall where the channel or current of the river is opposite the Dickinson's property?

A. Well, it would be mostly the middle of the river now, at this low—I mean at pool stage.

Q. Since the construction of the Winfield Dam, has that channel or current been changed to any appreciable degree?

A. No; it has not.

Q. Where was the current in the old days before the first canalization of the Kanawha River?

A. The old salt boat men—my father was a salt boat man and had an uncle that was a salt boat pilot—run the boats down on the other side; they called it the Hungerford Chute.

Q. That was the channel, north of the island?

A. Yes.

Q. That remained the channel until after Lock 6 was constructed?

A. Yes.

Q. And then the channel was shifted to the center of the stream where it is now?

A. That's right. The lock of the dam was on the other side of the river; naturally it would put the channel there.

Q. Was any dredging done to establish that new channel?

A. Yes; they dredged it all out.

Q. Mr. Keeney, have you examined the protective work that Mr. Dickinson has done on his property?

A. Yes, sir.

Q. Apart from the brick walls and brick wells for the trees, is any of that earth and rock fill in excess of what is necessary to protect the property now?

A. I don't think so; no, sir.

Q. Could adequate protection have been put in there prior to the raising of the stage at less cost than after the damage was done?

A. Yes, sir.

Q. Have you made a study or plan of what, in your opinion, would have afforded adequate protection of his property if installed prior to the raising of the pool?

A. Yes; we—I have a sketch of what it would have took to have done it.

142 Q. Will you describe briefly what that protective project involves?

A. Well, in digging a key way 4½ foot deep by 6 foot wide, filling that with stone, and then start it off with a riprap from there and going 60 feet distance up the hill.

Q. On a slope?

A. On a slope; yes. And going 60 foot up the hill, the riprap would have been 1½ foot thick—that is, an average of that; of course, some places it would have been thicker and some less—it would have took 90 cubic feet or 3.33 cubic yards.

Q. That is per linear foot?

A. That is per linear foot.

Q. For the riprapping?

A. That's right.

Q. How much for the toe wall?

A. 4.33 cubic yards.

Q. That would be the toe wall and riprap combined, would it not?

A. That's right.

Q. 4.33 cubic yards per linear foot?

A. Yes, sir.

Q. Have you computed the cost of that as of September 1938?

A. That would have been at $2.75 a cubic yard in place.

Q. That is for the rock?

A. That is for the rock.

Q. How much for the dredging in connection with your toe wall?

A. The dredging would have required three days to dredge, at $80 a day, amounts to about 58 cents per lineal yard.

Q. That would make how much per lineal foot?

A. $16.82.

Q. And that would give you an over-all cost of how much?

A. $6,913.02.

Q. How do you arrive at your 1938 cost, Mr. Keeney?

A. After the different jobs I have done in handling stone in different places on the river.

Q. You were doing that kind of work in September 1938?

A. Yes, sir.

Q. Your records show what those costs were?

A. Yes.

Q. You said $6,913.03, did you not.

A. That's right—two cents.

143 Q. Two cents, Mr. Keeney, have you recently, within the last year, constructed a similar piece of river bank protective work for the Federal Government?

A. Yes, sir.

Q. And where was that?

A. Naval Ordnance plant down at South Charleston.

Q. Was that the river bank in front of the Commandant's home?

A. That's right.

Q. How far up the river is the Commandant's residence from Dickinson's property?

A. Well, I don't believe it is a quarter of a mile, but it is pretty close. I don't know just the exact distance. It was in sight of it.

Q. Was the purpose of that protective work to prevent further erosion of the river bank?

A. Yes, sir.

Q. Was the design and plan on this job for the Federal Government the same as you have proposed for Dickinson's property?

A. Yes, sir.

Q. Did the Government engineers or Government officials supervise that work?

A. Yes, sir, Mr. Wright, from Huntington, supervised it.

Q. Did any officer from the local Ordnance plant supervise it?

A. Yes, Lieutenant——

Q. Was it Lieutenant Davis?

A. No; Gilmer. Lieutenant Gilmer had charge of the work, and Wright inspected it under him.

Mr. DYER. Your Honor, I don't see where it is material in this case just who supervised the other work or any of the work up there.

The COURT. Well, that part of it may not be material, but it doesn't hurt anything.

By Mr. JAMES:

Q. What was the cost per linear foot of this protective work that you did at the Naval Ordnance Plant?

A. $22.90 a foot.

Q. That was based upon 1943 costs?

A. Uh-huh.

Q. Whereas you computed the Dickinson job on 1938 costs?

A. That's right.

144 Q. Mr. Keeney, in your opinion, would any protective work have been necessary at the Dickinson property if the pool stage had not been raised?

A. No, sir. It stood there for thirty-five years without any ero- [redacted] and should have stood there longer.

Q. Now, Mr. Keeney, have you, in like manner, made a study of the Frank Withrow property involved in this suit, which is situate a few hundred yards downstream from the Dickinson property?

A. Yes, sir.

Q. Have you examined carefully the character and extent of the erosion that is going on there on Withrow's property?

A. Yes.

Q. Will you tell us what caused that erosion?

A. That is saturation of the soil caused by the raising of the pool, wind waves and steamboat waves undermining the bank.

Q. The same reasons that existed in the case of the Dickinson property?

A. That's right.

Q. Has that erosion run its full course, or is it continuing?

A. Oh, it is continuing; it will continue till it grades itself, without there is something done.

Q. In your opinion, how far will that erosion continue unless some protective work is put in there?

A. Well, it would have to slope itself to about 1 to 2 or 1 to 1½ back on the bank before it would ever stop.

Q. Would that take in all of the trees that now stand upon the river bank?

A. Yes, sir.

Q. And perhaps a part of the street as well?

A. That's right.

Q. Where is the channel or current of the river opposite the Withrow property?

A. Well, the channel is near the middle of the river there.

Q. Was the channel at the same place substantially before the stage in the river was raised?

A. Yes, sir.

Q. Have you made a like study or plan of protective work which, in your opinion, would have afforded Withrow adequate protection there if installed prior to the raising of the pool?

A. Yes.

Q. Will you describe briefly what that protective work involves?

A. Well, that would have been the same thing as up at
145 Dickinson's, a 4½ by 6 foot trench or toe wall—I mean a trench to put the stone in a key way. Twenty-seven cubic feet, or one cubic yard, of stone or riprap, 42 feet up the hill, 1½ foot thick; 63 cubic feet or 2.33 cubic yards—that is up the hill—and the key way would have been 3.33 cubic yards, at $3.75 per cubic yard, which would have been $12.48.

Q. And one cubic yard for the dredging was how much?

A. Fifty-eight cents.

Q. That made a total of——

A. $13.06.

Q. Per linear foot?

A. That's right.

Q. And I believe that river front is 180 feet?

A. 180 feet, would be $2,340.

Q. $2,340?

A. That's right.

Q. I notice that the length of your riprapping on the slope is not as long as down at Dickinson's. I believe you said it would be 42 feet at Withrow's?

A. Yes. Well, he has a much steeper bank there, and another thing, that bank was a rocky bank.

Q. Any difference in trees and vegetation?

A. Yes, the rock up a good ways on that bank above the old pool, because I know I tried to buy those stone at one time.

Q. So you figure the riprap would not have to stand as high up as down at Dickinson's?

A. That's right. If you could have put the riprap up there at the foot of these trees, the erosion would not have undermined it, because the riprap would have protected it.

Q. Have these costs been in like manner figured on the basis of the costs in September 1938?

A. That's right.

Q. Mr. Keeney, in your opinion, would any riprapping have been necessary at Withrow's property if the pool stage in the river had not been raised?

A. No, sir; would not have needed any.

Q. Why do you say that?

A. Why do I say it?

Q. Yes.

A. Because that was a rocky bank, as I told you—a lot of loose rock on that bank up a good ways on the bank; and another thing, it had stood there all these years without any erosion before the pool went up.

Q. Mr. Keeney, there is testimony in this case to the effect that before this pool stage was raised the Government went
146 there and removed all the trees and vegetation along the river bank up as high as 574 feet, I believe, the easement area. What effect, if any, would that have upon the extent or course of the erosion when the pool was raised?

A. Well, that would have quite a bit.

Mr. BOYD. If your Honor please, I am not certain to what testimony Mr. James refers. If there is testimony I would like to suggest that the correct elevation is 568, not 564—two feet above the Winfield pool.

Mr. JAMES. That is 566.

Mr. BOYD. 566 is pool elevation. The banks were cleared to 568.

Mr. JAMES. Not 574?

Mr. BOYD. Not 574.

Mr. JAMES. I am just relying upon the testimony of Mr. Hayes and Mr. Withrow. That is the basis of my question. If there is a dispute, however, there, I take it it will be developed later.

The WITNESS. What was the question?

(The question was read as follows: "Mr. Keeney, there is testimony in this case to the effect that before this pool stage was raised the Government went there and removed all of the trees and vegetation along the river bank up as high as 574'——)

The COURT. You had better do something about that figure.

Mr. JAMES. As I understand it, that is our testimony. Our witnesses may have been in error to that extent; that I don't know. For the present we are not willing to concede that our witnesses are wrong and that this gentleman is right.

The COURT. You don't think that figure is material in the question, do you?

Mr. JAMES. No, sir.

The COURT. Therefore the question might contain something to show that that figure might be doubtful.

Mr. JAMES. At the Court's suggestion I will change that up to 568—vegetation and trees had been removed from the river bank up as far as 568 feet above sea lever, which is two feet above the new pool, or a total of about thirteen and a fraction feet. What effect, if any, would that have upon the course of the erosion?

A. Well, it would have quite a bit. If you moved everything out of the way of the water it is bound to have more force than it would have if it had something there to break it off. You take all the timber off and all the vegetation off down
147 to the surface and turn the water on it, and wind waves, there is nothing to break it off.

Q. In other words, the trees and vegetation serve as a protective wall themselves?

A. That's right. Another thing, that killed the trees, these stumps that were there, and that caused the dirt or ground to give way.

Cross-examination by Mr. BOYD:

Q. Mr. Keeney, were you familiar with the condition of the Dickinson property river bank in 1936?

A. No, I couldn't say that I was.

Q. Are you a geologist?

A. No.

Q. Or hydraulic engineer?

A. No.

Q. What studies have you made in the causes of erosion?

A. Well, really, I have not made any except just what I see with my natural eye from these river banks. I have contracted all up and down the river here putting in protection for all these people that have bank protection put in, coal companies, telephone people, water companies, where I riprapped the bank for the gas people. After they dig a pipe line, you understand, they generally put rock on it to protect the waves from washing it out.

Q. That riprap would be necessary whether the erosion was caused by the dam or by any other cause, would it not, so long as the land is eroding?

A. Sure. If it was washing you would have to riprap it or do something with it.

Q. Do you know whether any natural drains caused any of the erosion on Dickinson's land?

A. No, I wouldn't think so. Oh, probably——

Q. Speak up a little, please.

A. Probably there would be a little erosion from heavy rains or something like that, but the real erosion came from this pool.

Q. And the high floods do not cause erosion?

A. Well, to some extent; yes sir.

Q. Do you know the height of the top of the fill on Mr. Dickinson's river bank?

A. At this time?

Q. Yes.

A. Well, it seems to be shale and rock.

Q. No, do you know the altitude or elevation?

A. No, I don't.

148 Q. Do you know how many feet it is above the pool level?

A. No, I don't.

Q. Do you know approximately how far it is above pool level?

A. No; I couldn't tell you that.

Q. But you are quite sure that it is necessary that it be that high in order to protect the river bank adequately?

(Witness nods.)

Q. You testified, did you not, that you put in the riprap in front of the home of the Commandant of the Naval Ordnance station?

A. Uh-huh.

Q. And that you charged $22.92 a lineal foot?

A. Yes.

Q. Was that a fair and reasonable price?

A. Yes, sir. I made them two different propositions, and they accepted that one. That was the most costly.

Q. Is it a fact that the home of the Naval Commandant is situated in a bend of the river and on the outside of the bend?

A. How is that?

Q. Is it a fact that the home of the Commandant where you placed the riprap is situated on the bank of the river on the outside of a bend?

A. It is right in below a bend. The bend comes in up at the pump house. It is about straight from there down to the mouth of Davis's Creek.

Q. Is the force and direction and proximity of the current the same at the Commandant's house as at Dickinson's?

A. I would say it was.

Q. Is it correct that you estimated the cost of riprapping Dickinson's at $16.82 a lineal foot?

(Witness nods.)

Q. Is the differential between that cost and the cost charged for the riprap at the Naval Commandant's house due solely to the increase in cost of labor and materials?

A. Yes, sir.

Q. So that the figure that you quote of $16.82 as of September 1938 is the cost of placing the riprap on Dickinson's property after the water had been raised.

A. After—before the water had been raised.

Q. You placed the riprap on the Commandant's home after the water had been raised; is that correct?

A. That's correct.

149 Q. You testified that the differential between the two costs was attributable solely to the increases in labor and material costs, yet the figure for the placing of the riprap for the Commandant is for placing it after the water was raised.

Mr. JAMES. Just a minute, if your Honor please. There is no testimony that riprapping was done below the water in the armor plate plant job. It is all above the water.

The COURT. Well, that can be explained by the witness, if so.

Mr. BOYD. There is testimony that a substantially similar job was done at the Commandant's home.

Mr. JAMES. That's right, but you have a different starting point.

The COURT. What about that, Mr. Keeney?

The WITNESS. What's that?

The COURT. What about this question that is being raised? Was the ripapping at the Commandant's house carried as far down in the river as what you estimate down there at the plaintiff's?

The WITNESS. No; it just went to pool stage, the last pool.

By Mr. BOYD:

Q. You commenced at pool stage at Winfield?

A. That's right.

Q. Is riprapping effective unless it is carried below the pool stage?

A. That seems to be holding, and they seem to be satisfied with it, and I put it in at Montgomery and it is holding.

Q. In your opinion, is it effective?

A. Well, in case you haven't got a slip. If you have got a slip and just want to put protection to keep the wind waves from slapping and the top sliding off, that is effective.

Q. At the Dickinson property in 1936 you don't know whether there were slips, slides, or what the condition of the property was?

A. Well, I hadn't noticed it I hadn't examined it particularly. I had been up and down, but of course I had not done any work right in that particular vicinity for several years.

Q. You testified a few moments ago that you were not familiar with the condition of the property in 1936?

A. That's right.

Q. And now you testify that the existence of slips and slides may change your plants for riprapping. If you don't know the condition there, how could you make the plan?

A. Well, the way we arrive at the plan, if they had not put the water up there we knew that the bank had not slipped any; right down below there it had not slipped any.

150 Q. You say "we." Who is "we"?

A. Well, everybody that knows what is up and down the river knowed it.

Q. So you will testify that you knew that Dickinson's bank had not slipped any and was not in such condition at that time that riprapping, to be effective, would have to be carried below pool level?

A. Well, I wouldn't say, because I don't know the conditions exactly in '36, what the bank was.

Q. So you don't know——

A. But no——

Q. The question is about your knowledge of Dickinson's land.

A. Well you are right; you are right about that.

Redirect examination by Mr. JAMES:

Q. In connection with the riprap at the Commandant's home, or Naval Ordance Park, was your rock toe wall beneath the surface under the pool up there?

A. Yes, sir.

Q. In the same manner that your rock toe wall is planned to be beneath the surface of the old pool down at Dickinson's?

A. That's right.

(Witness stands aside.)

H. L. CAMPBELL called as a witness by the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. Will you state your full name, please, sir?

A. H. L. Campbell.

Q. Where do you live, Mr. Campbell?

A. 1550 Lewis Street in Charleston.

Q. How long have you lived in Charleston?

A. I am a native of Charleston. I did not live here the whole time.

Q. Forty-some years?

A. Forty-some years.

Q. What is your business or profession, Mr. Campbell?

A. Civil engineer.

Q. How long have you been practicing that profession?

A. Since 1911.

Q. What is your present employment or official office?

A. City engineer.

Q. How long have you been city engineer?

A. Since 1923.

Q. That is of the City of Charleston?

A. City of Charleston.

151 Q. In connection with your work and experience as an engineer and as City Engineer for the City of Charleston since 1923, have you had occasion to be concerned with river bank erosion and protective measures along river banks to prevent erosion?

A. Yes, sir; I have.

Q. Are you generally familiar with the Kanawha River between Charleston and say St. Albans?

A. Yes, sir.

Q. Have you had occasion to make a study of the W. M. Dickinson property at South Charleston which is involved in this suit?

A. Yes, sir.

Q. Have you made a similar study of the Frank Withrow property a few hundred yards south of there?

A. Yes, sir.

Q. Have you noticed particularly the amount of erosion that has occurred at both of these properties?

A. Yes, sir.

Q. I believe at the Dickinson property a good deal of protective work has been done?

A. Yes; they have put in quite a bit of fill in there.

Q. Did you see photographs of the erosion that went on there before the protective work was done?

A. Yes, sir.

Q. Mr. Campbell, do you know what caused that erosion at the Dickinson and Withrow properties?

A. I have an opinion as to what caused it.

Q. What is your opinion?

A. My opinion is that the raising of the pool level caused it.

Q. Will you elaborate upon that a bit? Just how does the raising of a pool stage cause erosions on a river bank?

A. Well, the banks in general along the Kanawha River have been stable since the dams were built. Dam No. 7 was built in the early 1890's, and those banks were stable until the Winfield Dam was built and the water in the new pool was established. There is evidence that the banks were stable out to the large trees which are there at the present time, and it is common knowledge that when the Government raised—before they raised the pool they stripped

the banks of all vegetation—at least between the old pool and the new pool—probably a little above the new pool. These banks were originally deposited there by deposits from the river, and they were of such a nature that when they were saturated with
152 water they became softer and became susceptible to the erosive action of the river, both wave action and current, during raises in the river.

Q. Mr. Campbell, do you know whether or not before the raising of the pool stage at the Dickinson and Withrow properties there was any appreciable amount of erosion going on?

A. No; I do not know, because I never saw the banks before.

Q. Do you know whether or not, within the Winfield pool generally—the area of the Winfield pool—there was any appreciable amount of erosion before the construction of the Winfield Dam?

A. In passing up and down the river over a period of years both before and after the dam was built, before the dam was built I noticed no erosion, but since the dam has been built you can see erosion taking place all up and down the river.

Q. On both sides?

A. On both sides. You asked me if I knew that there had been any erosion. The indications there are, on account of the many large trees growing on both sides, that there was not much erosion; if there had been much erosion the banks would have caved in and the trees gone with it long ago.

Q. Have you examined carefully the plan of protective measures designed by Mr. Plumley and Mr. Keeney?

A. Yes, sir.

Q. (Continuing.) For the Dickinson property, on the theory that if put in before the raising of the pool it would have afforded them adequate protection?

A. Yes, sir.

Q. Will you state whether or not in your judgment the extent of protection suggested by these gentlemen is adequate or inadequate, or would be adequate or inadequate?

A. It would have been adequate if placed before the erosion started.

Q. Is it true that adequate protection could be put in before the waters raised at less expense than after the waters raised?

A. Yes, sir.

Q. Did you hear the testimony of Mr. Plumley and Mr. Keeney as the approximate cost of this protective work as of September 1938?

A. I didn't hear the testimony of Mr. Plumley, but I did hear the testimony of Mr. Keeney.

Q. Do you have an opinion as to costs for that kind of work in September 1938 that varies greatly from that of Mr. Keeney's?

A. No; I think they have estimated the cost very closely. I think they could have gotten the riprap and toe wall for
153 $3.75 and excavation for about 60 cents a yard.

Q. Have you likewise examined the plans and specifications of the protective work proposed by Messrs. Gardiner and Keeney for the Withrow property?

A. Yes, sir; I did.

Q. What would you say about those plans with regard to their sufficiency and cost?

A. I think it would have been sufficient, and their cost was about right.

Q. Mr. Campbell, is the erosion still continuing at the Withrow property?

A. Yes, sir; it is.

Q. How long, in your opinion, will their erosion continue unless protective measures are installed?

A. The erosion will continue until such time as the banks become stabilized.

Q. And about how much of the river bank and those trees would that take, in your opinion?

A. It is hard to determine how much bank it will take. That will depend entirely upon how much erosion occurs; but it will take between 20 and 30 feet off the top of the bank.

Q. That would include all of the trees that now stand there?

A. Yes, sir; it would include all of them.

Q. And a goodly portion of the street as laid out, but which has never been paved?

A. Yes, sir; part of the street.

Q. Mr. Campbell, in your opinion would any riprapping have been necessary at the Dickinson property if the pool stage had not been raised?

A. In my opinion, it would not have been necessary, because the banks have apparently been staple since Lock 7 was built.

Q. And would you have the same opinion with respect to the Withrow property?

A. The same opinion; yes, sir.

Q. Did I mention Dickinson first or Withrow?

A. You mentioned Dickinson first.

Q. Then it is your opinion that if the pool had not been raised at Withrow's property it likewise would not have been necessary to riprap it?

A. That is my opinion; yes, sir.

Cross-examination by Mr. BOYD:

Q. Mr. Campbell, you testified that it was a matter of common knowledge that the banks were stripped of all vegetation by the Government. Is that correct?

A. That is not correct.

154 Q. Would you restate what you said a few moments ago?

A. I believe I stated that the Government stripped from the original pool to the new pool, or a little above it.

Q. They stripped what?

A. The vegetation.

Q. All vegetation?

A. Yes.

Q. Isn't it a fact that the Government simply cut trees and brush and so on, and left sod, weeds and so on undisturbed?

A. It was my opinion that they cut almost everything off.

Q. Do you know whether they did?

A. It is my opinion that they did.

Q. I am not asking for an opinion; I am asking for your knowledge.

A. I didn't follow along behind them to see what they did.

Q. Then you don't know what they did?

A. No, sir. Oh, I do know that they cut vegetation off. Certainly I know that; but you were trying to confine me to weeds and small vegetation.

Q. No; I am simply trying to clarify this point. I understood you to testify that the Government stripped the banks of vegetation. If that is a fact I would like for you to say so.

A. I testified that it was my opinion that they did strip it of vegetation.

Q. Do you know whether the Government stripped all vegetation?

A. No; I do not know whether they stripped all vegetation.

Q. Do you know, or have you an opinion, as to whether Winfield Dam is the sole cause of erosion at the properties of the plaintiffs, Dickinson and Withrow?

A. It is my opinion that it is the sole cause.

Q. Isn't it a fact that erosion increases at those properties especially during times of flood and immediately afterwards?

A. Under what conditions?

Q. Under flood conditions, when the——

A. After the banks had been stripped?

Q. Let me restate the question. Isn't it a fact that in times of flood following the elevation of the water within the pool to its present level, erosion increased and is most noticeable in those times of flood and immediately afterwards?

A. Erosion is more apt to occur during times of flood.

Q. Do you know what effect the Winfield Dam has upon the Winfield pool in times of flood?

Mr. JAMES. I didn't catch that, Mr. Boyd.

Mr. BOYD. Will you read that?

155 (The question was read.)

A. If the gates are raised after the elevation of the water at flood time, the dam would not have much effect upon it, but if the gates are not raised completely out of the water they would have some effect upon that, naturally.

Q. Do you know whether the gates are raised so as to minimize the effect?

A. The gates are raised to let some water through and minimize the effect of the flood; yes.

Q. Do you know whether the gates are or have been ever operated in time of flood so as to raise the elevation of the Winfield pool beyond elevation 574?

A. No, I don't.

Q. Do you know whether in times of flood the gates have ever kept in operation when the flow of the river at the Winfield Dam reached or exceeded 80,000 second-cubic feet?

A. No, I don't.

Q. You testified on direct examination that the protection offered by the plans submitted by Mr. Plumley and Mr. Keeney would give adequate protection. Is that correct?

A. In my opinion it would, yes; if put in before the erosion commenced.

Q. In your opinion would they give more than adequate protection?

A. No; I don't think so.

Q. You think that all of it would be required?

A. Yes. Whether it was required or not, I think any engineer would put it in.

Q. As a matter of sound engineering practice you believe that all of the protection covered by their plans was necessary?

A. Yes.

Q. Are you familiar with the condition of the Dickinson and Withrow properties in 1938 immediately before the pool elevation of Winfield was raised at those two points?

A. No, only from observation at the present time and forming an opinion from what I can see.

Q. From what you see now?

A. What I see now; yes, sir.

Redirect examination by MR. JAMES:

Q. Mr. Campbell, I wish you would clarify your use of the term vegetation. You testified that in your opinion the Government stripped the river banks within the easement area of vegetation. Did you mean to include in that grass and weeds, or just shrubbery and trees?

A. I believe I stated they cleared it of all vegetation.
156 Of course, I meant the trees and small bushes and willows.
Q. You did not mean to include grass and weeds?
A. No; not at all.
Q. You testified, I believe, that the erosion is more noticeable following high water or floods. Does that necessarily mean that the river banks have not been undermined, trees undermined during the periods prior to the flood?
A. Not at all.
Q. Does it mean that when the flood comes along it takes into the river that which has been gradually undermined in between flood periods?
A. It means that during flood times there is a greater current and that the water will do more cutting at that time and possibly take in what has already caved in and more, too.
Q. The flood itself would not cause the erosion, or that much erosion, unless there had been constant undermining in between floods, would it?
A. Yes, the bank could have been cleared of trees and small vegetation between low pool and upper pool, and it could not—perhaps it might not have eroded at all until they had a flood. It was possible for it to lay there and erode when a flood came along.
Q. The Winfield pool, Mr. Campbell, was raised to its full stage of 566 feet on September 22, 1938. Has the erosion continued on since that date?
A. It has continued, and is continuing.
(Witness stands aside.)

RICHARD HIGGINS, called as a witness by the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. Will you state your full name, please sir?
A. Richard Higgins.
Q. Where do you live, Mr. Higgins?
A. Charleston, West Virginia.
Q. How long have you lived in Charleston?
A. Since 1911.
Q. What is your business or profession?
A. Real estate.
Q. How long have you been engaged in that business?
A. Twenty-five or six years.
Q. Twenty-five or six?
A. Yes.

Q. Have you held any offices connected with the real estate brokerage business?

157 A. Yes, sir; I was president of the local board and also president of the state board.

Q. State board of what?

A. State Board of Realtors.

Q. Are you familiar with real property values in South Charleston and Spring Hill?

A. Yes, sir.

Q. Have you dealt in property in that neighborhood over a period of years?

A. Yes, sir.

Q. Are you familiar with the W. M. Dickinson property at South Charleston involved in this suit?

A. Yes, sir.

Q. Have you made a close study of it in recent weeks for the purpose of placing an appraisal of market value on it?

A. Yes, sir.

Q. What are the dimensions of the Dickinson property?

A. It is 411 feet on the river bank and 430 feet on the west side from the river bank to Route 60.

Mr. Boyd. Will you speak up, please? I can't hear you.

A. 430 feet on the west side between the river bank and Route 60, 379 feet on Route 60 and 321 feet on the east side.

Mr. Boyd. Three hundred and how much?

A. Twenty-one feet.

Mr. Boyd. Thank you.

By Mr. James:

Q. A total area of how much?

A. A total area of——

Q. Well, the deed calls for 3.1 acres.

A. 3.1 acres; that's right.

Q. Mr. Higgins, did you hear the testimony of Mr. Dickinson as to how much he paid for the property in August 1937 and the cost of his improvements he put on it between August 1937 and September 22, 1938?

A. Yes, sir.

Q. Will you state what, in your opinion, would be a fair market value of the entire Dickinson holdings, his property together with the improvements thereon, as of September 22, 1938?

Mr. Boyd. Again, for the record, we save our objection. We do not concede the relevancy of testimony in 1938.

The Court. I believe this particular matter has not been discussed as to its pertinency. I have ruled that for the purpose of determining whether protection was economically desirable it

would be admissible, subject to later ruling on that.

158 Mr. JAMES. That is the purpose of it here, your Honor.

The COURT. All right.

Mr. JAMES. Will you answer the question now?

A. You mean the total property, improvements, and all as of——

Q. As of September 22, 1938.

A. $45,000.

Q. Mr. Higgins, you have seen the Government's map of this property which shows the amount of the river bank which will be flooded permanently?

A. Yes, sir.

Q. The area of which is 0.22 acre?

A. Yes, sir.

Q. What, in your opinion, would be a fair market value for the 0.22 acre on the river bank which has been flooded permanently as of September 22, 1938?

A. $785.95.

Q. Beg pardon?

A. $785.95.

Q. $785.95. Would you mind indicating how you arrive at that value for the 0.22 acre permanently flooded?

A. I took the price he paid for it and what he paid for his grading and improvements and reduced it to a decimal, took one-half of the amount of the cost of the property for the permanent flooding and one-half of that for the intermittent flooding.

Q. In your opinion that represents as close as you can arrive at a fair market value?

A. Yes, sir; I don't know how to get at it any other way.

Q. According to the map there the area between the new pool, 566 feet, and elevation 574 feet, which, according to the evidence, will be flooded temporarily or intermittently, is 0.1 acre. What, in your opinion, would be a fair market value of a flowage easement to flood intermittently this 0.1 acre as of September 22, 1938?

A. $178.65.

Mr. BOYD. How much?

The WITNESS. $178.65.

By Mr. JAMES:

Q. I believe you have already indicated that in your view land that is flooded temporarily—that is the value of a flowage easement to flood temporarily—takes about half the value of the property?

A. That that is flooded permanently.

159 Q. Mr. Higgins, are you familiar with the character and extent of the erosion that occurred to Dickinson's property?

A. Somewhat.

Q. Have you seen the photographs of the erosion that occurred there before the protective work was put in?

A. Yes, sir.

Q. Have you heard the testimony of Messers. Plumley and Keeney as to the cost of installing adequate protection there prior to the raising of the pool stage?

A. Yes, sir.

Q. In view of the character and value of the Dickinson property as of September 1938 and the extent of the erosion, in your opinion, would the owner, in order to prevent that erosion, have been justified economically in going to the expense of putting in the protective work that Keeney and Plumley have suggested?

A. I believe he would.

Mr. DYER. I don't think he has qualified him sufficiently to answer that question.

The COURT. I think he has. Overruled.

A. Yes, I think so.

By Mr. JAMES:

Q. Mr. Higgins, are you likewise familiar with real estate values in Spring Hill, or what used to be Spring Hill?

A. Yes, sir.

Q. Have you made a study of the Frank Withrow property that is involved in this suit?

A. Yes, sir.

Q. Have you examined that property and also the map of that property which is filed in this suit?

A. Yes, sir.

Q. Which shows the River Drive as a street on the map, but which has never been laid out or paved?

A. That's right; yes, sir.

Q. Have you noticed that Mr. Withrow owns the property completely around the dead end of that purported street?

A. Yes, sir.

Q. Have you seen the use to which that property has been devoted for the last several years?

A. Yes, sir.

Q. Would you say that the river bank part and the lots on which the two houses are constructed are used and enjoyed for one and the same purpose?

A. Yes, sir.

160 Q. What are the dimensions of the Withrow property?

A. The dimensions of the lots across the street are—or, rather, facing the river, is 180 feet. Well, I believe the depth of that is about 180 feet. I do not have the dimensions across the bank.

Q. You can use the Government's map on that, if you will [handing the map to witness]. What would the depth of those lots average?

A. About 180 feet in depth.

Q. And then the dimensions of the property between River Drive and the Kanawha River as it existed prior to the raising of the pool are likewise indicated on the map. Do you notice the dimensions of the so-called river bank?

A. 0.27 acre, I believe. Is that right?

Q. Yes.

A. Yes.

Q. Then according to the map it is 37 feet wide at one end and 33 feet at the other end, with a length of 180 feet.

(No answer.)

Q. How many buildings or structures are there on the Withrow property?

A. There are two dwellings and one single and one double garage.

Q. What, in your opinion, would have been a fair market value of the entire Withrow holdings, that is, the land and the improvements, as of September 22, 1938?

A. $16,650.

Q. Would you indicate briefly how you arrived at that value?

A. I arrived at that value by giving the land $50 a foot, which makes $9,000, and the home Mr. Withrow lives in at $4,000, his garage at $250, the four-room cottage at $3,000 and the double garage, $400.

Q. In arriving at that figure have you recognized the fact that Mr. Withrow does not own the fee in that purported River Drive?

A. Yes, sir.

Q. Have you taken into consideration, though, his more than ordinary interest in that street?

A. Yes; he has an interest in it. However, I disregarded it in the value. I think it enters into the enjoyment of the property.

Q. You think it really adds to the enjoyment and use of the property?

(No answer.)

Q. Mr. Higgins, 0.11 acre of the river bank across the front of Mr. Withrow's property has been flooded permanently.

161 Will you tell us what in your opinion was the fair market value of that 0.11 acre as of September 22, 1938?

A. $495.

Q. How do you arrive at that figure?

A. Reduced it to hundredths and multiplied it by eleven.

Q. Beg pardon?

A. Reduced it to the fraction and then multiplied by eleven.

Q. At what rate per acre did you compute it?

A. I used the $9,000 for the naked land and reduced that to hundredths and then I took half.

Q. And that gives you what market value of the 0.11 acre?

A. $495.

Q. And what is the rate per acre?

A. I didn't reduce it to acreage. I took the $9,000 and reduced it to hundredths of the price, but not the acreage.

Q. Well, what percentage did you allocate to the 0.11 acre, then?

A. Well, $9,000 divided by hundredths in price but not in acres.

Q. We have an area here in acreage that we want to value.

A. I haven't got it that way.

Q. Well, can you compute it on an acreage basis?

A. I could, I suppose. What is the acreage of the whole?

Q. Well, taking into consideration the river bank, which is 33 feet deep at one end and 37 feet at the other, you say the lots will average 180 feet entirely apart from the river bank?

A. Yes, sir.

Q. Now, then, assuming that the property, including the river bank, has an average depth of 200 feet, with a frontage of 180 feet, 180 times 200 would give you about six-sevenths of an acre, wouldn't it?

A. Forty-three, isn't it?

Q. About how much an acre?

A. Forty-three thousand square feet in an acre?

Mr. JAMES. Yes, forty-three thousand and a fraction. Some of these engineers can tell you.

Mr. GARDINER S. PLUMLEY. 43,560.

The WITNESS. Approximately six-sevenths of an acre.

By Mr. JAMES:

Q. And you have valued the whole of the land at $9,000?

A. Yes, sir.

Q. How much would that be per acre?

A. Approximately $10,500 per acre.

Q. Then 0.11 acre—do you figure the river bank as much per acre as the top land?

162 A. Well, I would say that depends. I haven't got it figured that way in this particular tract.

Q. I am not suggesting, Mr. Higgins, that an acreage basis is the only way to value this area. What you have taken is 0.11 acre of the river bank and put a value on it, and that value, I believe you said, was $495?

A. That's right.

Q. I think it would be helpful to the Court if you would just indicate how you arrive at that value.

A. Well, I took the price rather than the acreage and divided it into hundredths and took the eleven-hundredths of an acre—that would be eleven hundredths of the total price, whether it is acres or price——

Q. Now, wouldn't that depend on the whole tract being exactly one acre?

A. Well, wouldn't you be in the same position if you reduced it to acres and then took the eleven one-hundredths? Now, in acres you have got $10,500 per acre, and six-sevenths is worth $9,000.

Q. All right, now. Eleven one-hundredths of an acre would be how much?

(There was a pause while the witness seemed to be making a calculation.)

A. Approximately $512, according to my figures.

Q. You value the river bank at the same value per acre as the top land, or one-half?

A. One-half.

Q. And that gives you how much?

A. Approximately $512.

Q. Well now, what is your opinion as to a fair market value of this eleven one-hundredths of an acre which is to be flooded permanently—the fair market value as of September 1938?

A. I think I will still stick to my $495. I think that is the fair way to get at it—unless I have got the figures confused.

Q. All right, sir. Now, Mr. Higgins, the area between the top of the new pool and elevation 574 feet, according to the evidence, will be flooded occasionally or intermittently. Do you have an opinion as to a fair market value as of September 1938 for a flowage easement to flood intermittently this 0.04 acre?

A. I didn't figure that, because I thought it was too small to figure.

Q. Beg pardon?

A. I didn't figure that, because it was such a small amount of ground. I can if you want it. Four one-hundredths of an acre is not very much ground.

163 Q. Well, on the same basis as you have computed the value of this 0.11 acre, will you try to give us what, in your judgment, would represent a fair market value of that flowage easement as of September 1938?

A. No; I can't from those figures. It looks to me like $9.

Q. Mr. Higgins, have you examined the character and the extent of the erosion that has gone on at the Withrow property?

A. Yes, sir.

Q. Did you hear the testimony of Mr. Plumley and Mr. Keeney as to what it would cost to put in adequate protective measures there as of September 1938?

A. Yes, sir; I heard it.

Q. In view of the market value of the Withrow property—that is, all of it—as of September 1938, would it, in your opinion, have been economically sound to expend approximately $2,300 to make that protective work in 1938?

A. Yes, sir.

Cross-examination by Mr. DYER:

Q. Mr. Higgins, are you actively engaged in the real estate business at the present time?

A. Not at the present time. I am with the Rent Control.

Q. How long has it been since you were actively engaged in the real estate business in South Charleston?

A. Well, let's see. I went in there in December 1942.

Q. '42?

A. Yes, sir.

Q. You are not a civil engineer, are you, Mr. Higgins?

A. No, sir.

Q. Can you state as to what amount of the 0.22 acres of the Dickinson property is still under water, that is, the amount from 566 down to the old pool?

A. I don't believe I understand that question.

Q. Did you see the fills made by Dickinson?

A. Yes, sir; I was down there and——

Q. Does that fill cover up or reclaim any of the property that was flooded?

A. Does it what?

Q. Cover up or reclaim any of the property which the water was elevated on.

A. I don't know that.

Q. You don't know whether any part of the 0.22 acre is now under water or not?

A. No, sir; except what I was told and what the map shows.

Q. What use does Withrow make of the river bank?

A. Withrow?

164 Q. Yes.

A. I don't know that he made any use of it except for trees and that kind of stuff.

Q. Did you ever sell any river bank tracts just by themselves while you were in the real estate business, Mr. Higgins?

A. I have sold lots with river banks.

Q. I mean, did you ever sell just river bank by itself?

A. Yes.

Q. Where?

A. Kanawha City.

Q. When was that?

A. Bought one myself. Well, that was back in—oh, let me see. I couldn't tell you the exact date; maybe '16, '17, or '18—some place along there. Kanawha City had driven pilage and riprapped it and sold me the bank to a lot I already owned across the street.

Q. And you bought it and used it with your other?

A. That's right.

Q. Are any of the improvements of Mr. Withrow which are referred to on this river bank tract?

A. No, sir.

Q. Is there sufficient room from the top of the bank or the street line out to the brink of the bank to put any kind of building on?

A. No, sir; not where they pointed out the street line to me.

Q. In making this appraisal of the Dickinson property, I believe you say that the total property is worth $45,000?

A. Yes, sir.

Q. As of what time did you make that appraisal?

A. I made the appraisal just recently, but I took the figures he gave me for the cost he had put into the property other than the land.

Q. And he told you then what percentage of the building was completed?

A. Yes, sir.

Q. And you based your appraisal of that total value on the information given you by Mr. Dickinson?

A. That's right.

Q. And you didn't make an independent appraisal of the value yourself upon your experience as a real estate man?

A. Of course, I used that some in judging whether he was making the right estimate of his cost at that time, considering the property was so far completed.

Q. State whether or not you would consider it economically sound to expend $2,300 in riprapping the Withrow prop-
165 erty, taking into consideration only the river bank tract?

A. Yes; I think that would be true, because there is lots of property sold because it is river bank or has a river connection.

Q. Maybe you don't understand me. I mean if Mr. Withrow did not own any other property there except the river bank, would it be economically sound and good business to spend $2,300 just on that little bit of river bank?

A. If he just owned that and no other land?

Q. That's right.

A. I doubt if that would be true, because he would have nothing there to protect that would have a value; but in connection with the rest of his property——

Q. Then you have placed a value of $504 on the river bank there in connection with the actual market value of that land?

A. Connected with the rest of his property as he used it.

Q. But, now, if it wasn't connected, if it should be considered, as a legal proposition by the Court, that the other part should not come in, you would not recommend an estate to spend $2,300 just for the river bank alone?

A. No, sir; I would not.

(Witness stands aside.)

GEORGE F. SKIDMORE called as a witness by the plaintiffs, having been duly sworn, testified as follows:

Direct examination by Mr. JAMES:

Q. State your full name, sir.

A. George F. Skidmore.

Q. Where do you live, Mr. Skidmore?

A. I live in Charleston, West Virginia.

Q. How old are you, Mr. Skidmore?

A. Fifty-seven years old.

Q. How long have you lived in Charleston?

A. Thirty years.

Q. What is your business or profession?

A. I am in the real estate and insurance business, mortgage loan.

Q. How long have you been in the real estate business?

A. Twelve years.

Q. Are you familiar with real property values in South Charleston and Spring Hill?

A. Yes, sir; I am.

Q. Are you familiar with the W. M. Dickinson property at South Charleston involved in this suit?

A. Yes, sir.

166 Q. What do you understand to be the area of his holdings there?

A. Just a little over three acres.

Q. Did you hear Mr. Dickinson's testimony as to what he paid for that property in August 1937 and his testimony as to the improvements that he put on that property between August 1937 and September 1938?

A. Yes, sir; I heard that.

Q. Mr. Skidmore, are you in a position to give an opinion as to the fair market value of Dickinson's property, including improvements, as of September 22, 1938?

A. Yes, sir; I think so.

Q. What would you say would be the fair market value of that property as of that date?

A. That is after he had improved it by filling and erecting the dwelling house?

Q. Yes; filling and grading and his residence and the sanitary and storm sewers and the water and gas line and the gas tank and filling station.

A. Around $35,000.

Q. Beg pardon?

A. $35,000.

Q. You have seen the Government's map of this property indicating the amount of the river bank flooded permanently and the amount of the area above 566 up to elevation 574?

A. Yes, sir.

Q. Can you state what, in your opinion, would be a fair market value of the 0.22 acre of the Dickinson property as of September 22, 1938?

A. I have arrived at a value on that 0.22 at about $1,125.

Q. Will you indicate how you arrived at that value, Mr. Skidmore?

A. Yes, sir; I seem to have taken a little different method than some of the others. I reduced it as near as I could to the area of a lot. It appears to be about—it is about one-fifth of an acre, as near as I can figure it; I didn't run the decimal out.

Q. 0.22 acre?

A. Yes, sir. That is near one-fifth of an acre, and that makes about a lot and a half.

Q. Of what dimensions?

A. I mean a lot and a half 50 by 120. That would possibly miss it a few square feet. That is the method I used.

Q. And what value would you put on that?

A. I would have estimated that to be worth about $1,500.

167 That would be a lot 50 by 120, and would be only about $30 a foot.

Q. Would you value that river bank as much as you would upland which ordinarily would be used for lot purposes?

A. This lot I speak of here would be a lot up-land, just a lot in bordering the river. This is a lot 50 by 120 feet, not necessarily a river bank lot. I would value a lot that fronted on the river a little higher than that.

Q. But how about this particular 0.22 acre, which is the low part of the river bank?

A. I valued that at about half the price or half the value of an up-land lot.

Q. And that would give you about how much for this particular 0.22 acre?

A. Around $1,125.

Q. Now, Mr. Skidmore, 0.10 acre of the Dickinson river bank, according to the evidence in this case, will be flooded occasionally or intermittently. Will you state what, in your opinion, would be the fair market value of a flowage easement to flood that 0.10 acre intermittently, such value to be given as of September 22, 1938?

A. I arrived at a value of that part of the land at $200, but that is rather difficult for me to determine how much that is worth. I placed what I thought was a conservative value on it.

Q. $200?

A. Yes, sir.

Q. That is for the flowage easement?

A. That's right. That makes a total of $1,325 for both tracts.

Q. Mr. Skidmore, are you familiar with the amount of erosion on the Dickinson property, or have you seen the pictures that were made of that river bank during the eroding period?

A. Yes, sir; I have seen the pictures, but I would not be qualified to state how many cubic yards of land has gone into the river.

Q. Did you hear the testimony of Mr. Plumley and Mr. Keeney as to the cost of installing adeqaute protective measures there before the pool stage was raised?

A. Yes, sir; I heard that testimony.

Q. In view of the over-all value of the Dickinson property as of September 1938, state whether or not, in your opinion, the owner would be justified economically in expending approximately $7,000, in September 1938, to protect his property against that kind of erosion?

168 A. Yes, sir; I think he would be justified.

Q. That is from a business standpoint?

A. Yes, sir.

Q. In arriving at that opinion, have you given particular consideration to the fact that the property is Dickinson's home, or would it be justified commercially?

A. I think it would be justified commercially, because that land there could be readily sold into lots commercially if his home was gone.

Q. Mr. Skidmore, have you also examined and made a study of the Withrow property in Spring Hill?

A. Yes, sir.

Q. (Continuing.) Involved in this suit?

(No answer.)

Q. Did you see the amount of bank erosion on the Withrow property?

A. Yes, sir; I did.

Q. Are you familiar with the dimensions, generally, of the Withrow property?

A. Yes, sir; it is about 175 feet front or about 180 feet front.

Q. And an average depth of how much?

A. About the same, I think. I am not sure about that; I think it is about the same.

Q. How many buildings on it?

A. There is two dwelling houses and two garages.

Q. Would you say what, in your opinion, would be a fair market value of all of the Withrow property, including improvements, as of September 1938?

A. About $15,000—$15,200, to be exact, is the figures I have on it.

Q. Can you indicate briefly how you arrived at that value?

A. Yes sir. $7,200 is for land.

Q. $7,200?

A. That's right. One dwelling at $3,500 and another $4,000, and one garage at $200 and another at $300.

Q. Mr. Skidmore, 0.11 acre of the river bank across the front of the Withrow property has been flooded permanently. Will you state what, in your opinion, would be a fair market value of that 0.11 acre of the river bank as of September 1938?

A. I arrived at a value on that of $462.50.

Q. $462.50?

(No answer.)

Q. And how, very briefly, did you arrive at that value?

A. I arrived at that in a similar manner that I arrived at the Dickinson value.

169 Q. Now, Mr. Skidmore, according to the evidence 0.04 of this river front or river bank on the Withrow property will be flooded occasionally or intermittently. What, in your opinion, would be a fair market value of a flowage easement to flood that 0.04 acre occasionally or intermittently, such value to be fixed as of September 22, 1938?

A. I only placed a value on that of $100.

Q. How much?

A. $100.

Q. Did you use substantially the same method of arriving at that value as in the case of Dickinson?

A. Yes, sir.

Q. Did you hear the testimony of Mr. Plumley and Mr. Keeney on the matter of the cost of constructing adequate protective measures as of 1938 for the Withrow property?

A. Yes, sir; I did.

Q. In view of the character and value of the entire With. property and the extent of the erosion that has already taken place and likely to continue to take place in the future, state whether or not, in your opinion, the owner, in September 1938, would have been justified in expending approximately $2,300 to prevent that sort of erosion?

A. Yes, sir; I think he would.

Q. Mr. Skidmore, you noticed, I presume, that Mr. Withrow owns a narrow strip of five feet of land at the west dead end of River Drive, making his seven lots and the river bank actually contiguous. Did you notice that?

A. Yes, sir.

Q. You also noticed, of course, that River Drive has never been laid out or paved?

A. Yes, sir.

Q. Can you tell us whether or not that river bank property and the lots on which the two houses are constructed are being used and enjoyed for a unitary purpose?

A. Yes, sir, they are; they are being used for residence purposes and playground and parks.

Q. That is a part of Withrow's lawn there?

A. Yes, sir.

Cross-examination by Mr. DYER:

Q. Mr. Skidmore, in making the appraisal of the Dickinson property did you appraise it as a tract—on a tract basis or a lot basis?

A. I could appraise it either way.

Q. Well, which way did you appraise it?

A. I appraised it on an acreage basis.

170 Q. And how much acreage did you include in there?

A. 3.1 acres.

Q. In appraising the 0.22 acre, which is the land up to 566—what is covered with water—what basis did you appraise that on?

A. I appraised that—I reduced that to a lot, or the size of a lot.

Q. Why did you do that? It was a part of a tract, wasn't it?

A. Yes, sir; part of a tract.

Q. How did you lay off that lot?

A. Well, I didn't lay it off. I just took a lot 50 by 120 feet.

Q. In which direction did it run—up and down the river, or did you take a lot back on the high ground—make it part of a lot back on the high ground?

A. Well, I assumed this would be a lot back on the high ground.

Q. What dimensions did you make that lot?

A. 50 by 120.

Q. Did you lay that off so as to include the house and some of the buildings there, or what?

A. No, sir; that would be a vacant lot.

Q. Then you put a value on this 0.22 acres by projecting or laying out a lot on top of the high ground and giving it a value as to what this 0.22 would have used in connection with the high ground, is that right?

A. I used that as a comparison.

Q. That is the way you appraised it?

A. Yes, sir.

Q. How did you appraise the 0.10 acre?

A. I used my best judgment on that 0.10 acre. I——

Q. We don't question that, but what method did you use?

A. I wanted to finish that, Mr. Dyer.

Q. Well, go ahead.

A. I based than on my experience as a real estate man, that that would be a conservative price for that tract of ground.

Q. Well, what did you take into consideration?

A. Well, I took into consideration that the property wasn't damaged as much as the land that would be permanently flooded.

Q. Did you consider market value?

A. Well, yes, sir; that would be some consideration.

Q. Well, how did you arrive at $200 for that 0.10 acre?

A. Well, that is what I thought it was worth; that was my opinion.

171 Q. Well, you just looked at it and said, "It is worth that much"? You didn't use any formula or any way of figuring to bring that out; is that right?

A. Well, you very seldom see a little strip of land like that sold. In fact, in all my experience in the real estate business I have never seen a man foolish enough to sell off a strip of his river bank.

Q. You never knew of one-tenth acre over the river bank selling, either, did you?

A. No.

Q. We are trying to arrive at the market value as of September 1938, as near as we can. Do you know of any tenth acre from normal pool up to 574 that has been selling for as much as $200?

A. No, sir; not to an individual.

Q. Do you know of any that has been sold to corporations?

A. Well, the Government evidently wanted it.

Q. You are not placing a value on it because it is used by the Government, are you?

A. No, sir.

Q. Do you know what use Mr. Withrow was making of that small river tract between River Drive and the river?

A. Well, just—he was just using it in connection with his dwelling and the other dwelling near that.

Q. Any houses on it—on the river tract?

A. No, sir; not between the street and the river.

Q. Was there room for a house?

A. No, sir; there would not be room for a house there.

Q. In fixing the value of $16,200 on all the property of Mr. Withrow, did you give it value on account of River Drive being in there—did you take that into consideration?

A. Yes; I took that proposed street, or imaginary street—I understand there is one laid off there, but——

Q. I believe there is proof here it has been dedicated to the public and on the records as a dedicted street.

A. Yes, sir; I took that into consideration. While I understand Mr. Withrow would not undertake to build a house on there, but it is there, gives him light; space, a place for a playground, and all that sort of thing.

Q. Did you include any of the value of that driveway as in fee in the value of $15,200?

A. No, sir; I did not.

Q. How long do you say you have been in the real estate business?

A. I have been engaged actively in the real estate business twelve years, but I have been trading in real estate for the last thirty or thirty-five years.

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Q. Could you place a value on the 0.22 acres of Dickinson on an acreage basis?

A. I probably could if I had a little time to figure that out.

Q. But you did value it on the lot basis?

A. Yes, sir.

(Witness stands aside.)

Mr. JAMES. Your Honor, I would like to make Mr. Dyer my witness for about two questions, and then I will be willing to rest.

Mr. Dyer, will you take the witness stand?

Mr. DYER. It is unusual, but I will——

(The Clerk started to swear Mr. Dyer as a witness.)

Mr. JAMES. We will ask that he not be sworn.

JOHN R. DYER called as a witness by the plaintiffs, testified as follows:

Direct examination by Mr. JAMES:

Q. Your name is Mr. John R. Dyer, I believe?

A. John R. Dyer; yes, sir.

Q. You are Special Attorney for the Department of Justice connected with the Charleston office of the United States Attorney's office?

A. Yes, sir.

Q. As such Special Attorney you have brought a good many suits in the last few years to condemn flowage easement in the Winfield pool, have you not, Mr. Dyer?

A. I brought some of them; I didn't bring all of them in the Winfield pool.

Q. In all of these condemnation suits, the Government has sought to condemn up to elevation 574 in the Winfield pool, has it not?

Mr. BOYD. Objected to as irrelevant, your Honor.

The COURT. Overruled.

A. They took an easement area up to—I won't say all of them 574, because different places was different elevations.

By Mr. JAMES:

Q. Do you know of any of your suits for flowage easements in the Winfield pool where you took easements lower than 574 above mean sea level?

A. I wouldn't answer that unless I checked all my records, because I don't know whether all the parcels are the same or not.

Q. Generally speaking, though, you did condemn up to contour 574?

A. We never condemned any on the river bank.

173 Q. I didn't refer to condemnations on the river bank. My question pertained to flowage easements within the Winfield pool.

A. Yes; on the nonnavigable streams we condemned—now, I won't say that they are all up to 574, because it may be different in different creeks.

Q. Will you say that most of them are——

A. No; I won't say that. I will say that I will examine my records, if necessary, and make a statement for the record.

Q. Will you be kind enough, then, before the hearing is closed to examine your records and be able to state how many of the suits you have brought were to condemn easements below contour 574?

Mr. BOYD. If your Honor please, we will offer to stipulate that we will examine the records and supply this information and give it to Mr. James for use as evidence.

The COURT. It seems to me that would serve the purpose.

Mr. BOYD. That is, of course, with the reservation of the objection.

Mr. JAMES. All right. Just one more question.

Q. Mr. Dyer, in these suits we have reference to, is it not true that the Government has alleged in each of these petitions that the area between 566 and 574 will be flooded occasionally?

A. What do you mean?

Q. In your condemnation suits for flowage easements within the Winfield pool.

A. I think that is true.

Q. That it is so alleged in the petitions?

A. That is my recollection.

Mr. JAMES. That is all.

The COURT. Any questions of Mr. Dyer?

Mr. BOYD. No.

(Witness stands aside.)

The plaintiffs here rested their case.

(Thereupon, at 4:06 o'clock p. m., a recess was taken.)

AFTER RECESS 4:20 P. M.

Mr. JAMES. I believe Mr. Dyer is in possession of the necessary information in response to my question, so we can put it in the record by stipulation now.

The COURT. All right. Go ahead.

Stipulation

Mr. DYER. It is stipulated and agreed that the easement areas above normal pool, 566, of Winfield dam, which the Government has acquired on nonnavigable streams, vary from three feet at the dam to eight and one-half feet at Lock 6.

174 Mr. JAMES. And what is it at the Dickinson and Withrow property?

Mr. DYER. 574.

Mr. JAMES. That is the margin on which your plans are set up?

Mr. DYER. That's right.

Mr. BOYD. If he wants to stipulate that, then it must be added that it is not stipulated that the Government will flood to 574 the Dickinson and Withrow properties.

Mr. JAMES. We are not asking that.

Now, further, that in the condemnation proceedings by which such flowage easements were acquired by condemnation, the petitioner did allege that such flowage area above 566 would be flooded occasionally in connection with the operation of the Winfield Dam.

The COURT. Mr. Dyer has already testified to that.

Mr. BOYD. If your Honor please, the petitions are matters of record in this Court and proper subjects of judicial notice, and I would suggest that if the facts be found to be material they can be brought to your attention for examination, and if it is to be found as a fact, it can be made not as a result of any stipulation, but from your noticing the petitions themselves.

The COURT. Do I understand that all the petitions are uniform in that respect, whatever one says the other says?

Mr. DYER. I think that is true.

The COURT. All right.

Mr. BOYD. If the Court please, I understood in our conference in chambers the other morning that motions to strike evidence would be deferred to the end of the trial.

The COURT. That's right. They may be deferred until the trial is entirely over.

Mr. BOYD. I take it that would be after we are supplied with a transcript of testimony by the reporter?

The COURT. Yes, that will give you a better opportunity to make sure that you have all your motion in.

Thereupon the Government, to maintain the issues on its behalf, introduced to the Court the following evidence, to wit:

JOHN E. CARPENTER called as a witness by the Government, having been duly sworn, testified as follows:

Direct examination by Mr. BOYD:

Q. Please state your full name.

A. John E. Carpenter.

Q. What is your occupation, Mr. Carpenter?

A. I am associate superintendent of operations of dams.

175 Q. By whom are you employed?

A. The U. S. Engineers.

Q. How long have you been so employed?

A. I have been with the Engineers for about thirty-eight and one-half years.

Q. What are the duties of your position?

A. Operate movable dams, keep project depths in the river, make minor repairs to the dams.

Q. In the course of your employment have you any responsibilities in connection with Winfield Dam?

A. Yes, sir.

Q. How long have you been responsible for Winfield Dam?

A. Since it first went into operation—before it went into operation.

Q. Were you familiar with the development of the Kanawha River by the United States Engineers?

A. Yes, sir.

Q. Can you tell the Court the condition of the development of the river immediately before construction of the Winfield Dam was commenced?

A. Well, all of the structures at that time were getting in bad condition; they were old and antiquated; wickets were getting almost useless; the lock gates were in bad condition.

Q. Your answer, I believe, deals with present Winfield pool only; is that correct?

A. Well, it includes all of them.

Q. At that time had London Dam been completed?

A. Yes, sir.

Q. When was London Dam completed?

A. I think it was in—[witness refers to paper] completed May 12, 1934.

Q. Do you know when it was put in operation?

A. It was operated in September 1933.

Mr. JAMES. Which dam is this?

Mr. BOYD. London.

Q. Had the construction of the Marmet Dam been undertaken before Winfield was completed?

A. Yes, sir; it was completed.

Q. Were there any locks at Winfield before the dam was placed under construction?

A. You mean Winfield?

Q. The Winfield Locks.

A. None right at Winfield. They were No. 8 just above and No. 9 just below.

176 Q. Was not the present Winfield lock completed before the construction of the Winfield Dam was commenced?

A. Yes, sir.

Q. Can you state when the Winfield Dam was first used to impound water?

A. I would say it would be in about May 30, 1937.

Q. On October 21, 1936, what was the condition of the present Winfield Dam?

A. Well, it was under construction at that time with Coffer Dams. The dam was really under construction at that time.

Q. Were there any roller gates then in place?

A. No, sir. At this particular time you are talking about?

Q. Yes, sir. On October 21, 1936, the water behind Winfield was raised to the elevation of old Dam 8 or above, is that correct?

A. That is correct.

Q. Were not some of the rollers in Winfield in conjunction with Coffer Dams used for that purpose?

A. Yes, sir.

Q. When was the water raised above the level of old Dam 7 for the first time by Winfield?

A. That was May 7.

Q. What year?

A. '37.

Mr. JAMES. Excuse me just a minute. I believe this is fully covered in the pre-trial order. It gives each and every stage of the raise.

Mr. BOYD. The method by which they were raised and the condition of the dam as he knew it were not stated in the pre-trial order. My purpose is to show that the dam was in place, actually operated, capable of being used as a dam as it is today, at that time.

The COURT. Perhaps you can shorten that if you would take into account the facts that were included in the pre-trial order and just develop the additional facts, rather than go over those facts again.

By Mr. BOYD:

Q. On May 30, 1937, Mr. Carpenter, was Winfield Dam then capable of being operated as it is today?

A. Yes, sir.

Q. It has been testified in this case that Winfield Dam was completed on August 20, 1937. Can you state from your own knowledge whether that was the date of actual completion or the date of acceptance by the Corps of Engineers?

A. That was the date of acceptance.

177 Q. That acceptance was a formality, was it not?

A. That's right.

Q. Without the construction of Winfield Dam, would the present Winfield locks have been capable of use as locks?

A. No; certainly not.

Q. Before Winfield Dam was constructed, was it possible to maintain through navigation requiring a nine-foot channel below Marmet?

A. No, sir.

Q. Will you describe the method of operation of the dam at present?

A. At present the plan of operation is—in operating, starting from normal pool, if we have a surplus of water that the turbines cannot control the flow of water, then the press gates are opened or raised, and the flow of water is regulated by that method. If there is no unusual rise in the stream, that will control it. If there is, it is out of our hands, and we take the dam out and have no control of it. We can only control so m h water.

Q. When an unusual flow of water approaches the dam, what is the method of operation?

A. Just raise the gates gradually to keep an undue rise from coming in the river. Say, for instance, talking from the upper gauge that we always use, our gauges at Winfield are regulated by the one at old Number 6; we have an automatic there, or teletype,

that we talk to; and we lower the pool at Winfield Dam proper until the gauge, the normal gauge, at old 6 is maintained. After the gauge raises beyond normal at old 6, then you continue lowering the water or raising the press gates, if you will, at Winfield.

Q. In time of unusual flood, do you raise the gates completely out of the water?

A. Yes, sir.

Q. Can the gates be raised to an elevation which permits open river conditions? Is it mechanically possible to do that?

A. Yes, you can, but it is dangerous. A small boat might go under there.

Q. In times of flood, since the dam was put in operation, what method of control has been used to avoid excessive flooding above the dam?

The WITNESS. Please read that.

Mr. BOYD. In times of flood, since the completion of the dam, what method of control has been used to avoid excessive flooding above the dam?

A. I don't know whether I understand you or not.

178 Q. I would like for you to describe the full method, that is, whether you decide to lift the gates yourself or whether you receive instructions, and if so, from whom?

A. Well, we have a system of collecting rainfalls and stages of the river all throughout the watershed, and when the stages are at a certain point we commence lowering or raising our press gates, and keeping the pool at or below normal until there is so much water we can't control it, and then we continue to move the gates out of the water as the river rises above until we have no control over them, and they will tell you that is an act of God.

Q. If Winfield had not been built, would Marmet and London have been of any value to navigation?

A. No, sir.

Cross-examination by Mr. JAMES:

Q. Mr. Carpenter, I believe you said that May 20, 1937, is the date on which the Winfield Dam was accepted.

Mr. BOYD. No, he didn't say that; he said August 20, 1937, it was accepted.

Mr. JAMES. That's right. August 20.

Q. Now, that is the date on which the Government engineers inspected the dam and officially accepted it?

A. That's right.

Q. Although there may have been some cleaning up and minor work done after that?

A. It might have been, but it was officially accepted or turned over anyhow on that day.

Q. So that is the date on which the dam was officially completed, inspected, and turned over?

A. I wouldn't say that, that it was officially completed.

Q. Well, it wasn't inspected and accepted until that date?

A. It had been in operation before.

Q. Oh, yes; it was in operation long before it was completed?

A. That's right.

Q. But not complete operation?

A. The dam was.

Q. The dam itself?

A. Yes.

Q. In all of its entirety?

A. No; not in all of its entirety.

Q. All right. Then the full dam was not in operation completely until its construction was complete, was it?

A. It all depends on how you construe that. When you can work a dam, I would say it was completed, although it might have some minor details to go over.

179 Q. This dam was inspected and accepted as complete on this date which you have mentioned?

A. Yes.

Q. I believe you said that the Winfield Dam is operated in accordance with an automatic gauge reading at Old Lock 6?

A. Not automatic; teletype.

Q. Well, it is a gauge reading you can get by dialing a number?

A. Teletype.

Q. And that gauge is given to you in code, is it?

A. That's right.

Q. And according to the stage of the river at South Charleston or old lock 6, you control your dam machinery at Winfield?

A. That's right.

Q. There is a power plant, isn't there—turbine power plant—at Winfield?

A. Yes, sir.

Q. The difference in the level of the water in the tail race and the forebay—they used to call it the head race—gives you a fall of about 26 feet?

A. Twenty-eight feet.

Q. And that fall is your headwater which runs the turbines?

A. That's right.

Q. And whenever you lift the gates, raise the gates so that the level in the tail race and in the forebay are reduced to nearly equal, your power plant shuts down and stops, doesn't it?

A. It does; yes.

Q. You have to have that water head created by the gates in place to work your power plant there?

A. That's right.

Q. Now, at Winfield you don't raise your gates or draw the water down unless the stage at old Lock 6 is above 574, do you?

A. I don't know the elevation. We talk in feet.

Q. Can't you translate that into elevation above sea level?

A. Yes.

Q. And what it would be at South Charleston?

A. Well, I wouldn't know that at South Charleston. I could give it to you on the old gauge.

Q. I will reword my question. How high must the stage be at South Charleston before you raise your gates at Winfield and start drawing the pool down?

A. As soon as it goes one-tenth of an inch above normal.

Q. Normal is 574, isn't it?

A. Yes. Anything above that we can control, providing the power plant can operate.

180 Q. So that in that sense, in connection with the operation of the Winfield Dam, you do, in case of high water or enough water to have a pool at South Charleston of 574—you make full use of that easement up to 574 in connection with the operation of your dam?

A. Providing——

Q. You have got enough water to hold it there?

A. That's right.

Q. Because when you raise your gates down there, your power station shuts down. That is when that waterfall or head water is reduced below say seven or ten feet difference?

A. We do not have anything to do with that at all.

Q. I understand you don't run the power station?

A. No; we don't have anything to do with the amount of water. That is, for us to hold water back for them above our normal.

Q. But your normal is the elevation which you mentioned a moment ago?

A. And anything below that which they can use, that is all right.

Q. That is up to them?

A. Yes.

Q. And it is only incidentally that they can get the benefit of the additional operation of the power plant by your holding the gates down unless the stage at South Charleston gets above 574?

A. That's right.

Q. They incidentally get the benefit of that?

A. That's right.

Q. Although it is not your chief concern?

A. That's right.

Redirect examination by Mr. BOYD:

Q. Do you mean to say that normal pool is 574 and that you hold the water to 574, or 566?

A. I had not figured that. Wait a minute.

Mr. JAMES. I think if you will get your instructions from Winfield it will bear him out on that. That is my understanding.

Mr. BOYD. Do you want to get anything?

The WITNESS. Yes [leaving the stand for a moment]. What I was looking for was the easement that we have for the whole section.

Mr. BOYD. The question is not about easements, but about what you do with the water.

A. Oh! Well, we simply pass the water on.

181 Q. In response to Mr. James' question you spoke of normal as being 574?

A. I believe I said normal pool is 566, didn't I?

Q. You operate the dam, do you not, in accordance with instructions given you by the District Engineer?

A. That's right; we have written instructions and all of our men are trained to operate under those.

Q. From time to time, as the flow of water varies, you receive instructions from the District Engineer?

A. Well, I don't know that I can say that we receive them from him or not.

Q. The office of the District Engineer?

A. No, I don't mean that. These instructions are written out—orders are written that covers all phases of the water from one-tenth of a foot up to 50 feet.

Q. By one-tenth of a foot you mean one-tenth above 566?

A. That's right.

Q. Can you state what your instructions are when the water rises a tenth of a foot at Lock 6?

A. Well, you mean if the power plant cannot take care of it?

Q. Yes.

A. In a rising river we open the gates, maybe one foot or two feet——

Q. And is it correct that as the water rises you increase the openings under the gates so that the amount escaping increases?

A. That's right.

Mr. BROWN (of U. S. Engineers). That was 8, John, and not 6. That is 8.

By Mr. BOYD:

Q. And is it a fact that the purpose of raising the gates and permitting the escape of the water is to maintain the pool level at 566?

A. That's right.

Q. Since the dam was built, has it ever been so operated that as a result of the dam and its operation water behind it was impounded to 574, that is, 8 feet above normal pool stage?

A. No, sir.

Q. Can you state whether the dam would have any effect on the river if the elevation of 574 were to be reached?

(No answer.)

Q. Let me withdraw that and restate it. After the pool stage reaches 574, can you control the river at the dam?

A. Yes; a certain amount.

182 Q. Can you control it above 574?

A. Certain amount; yes.

Q. Can you do that by ordinary use of the dam?

A. Well, you continue opening the gates.

Q. I am speaking now about whether you can do it by ordinary use, not what you can do by misuse.

A. I don't quite get you on that.

Q. Well, is it your practice to attempt control of the river when it reaches a stage of 574 or higher?

A. That is——

Q. That is 8 feet above normal stage.

A. Oh, yes.

Re-cross-examination by Mr. JAMES:

Q. Mr. Carpenter, suppose you call for the stage over your teletype—for the stage at South Charleston—and the stage should be 573½ and not expected to go higher than that, would you raise your gates down at Winfield?

A. Yes; we would open them.

Q. Do you have written instructions as to what to do in a case of that kind that are official instructions from the District Engineer?

A. Yes, sir.

Q. Will you procure a copy of those instructions and let us have it?

A. That is confidential. The District Engineer might let you have it.

Q. Well, they are posted on the wall there.

A. All right. You get one from the engineer there. I couldn't let you have it.

Mr. JAMES. Will you gentlemen secure that information for us? I ask that because my information is in conflict—my information squared with your first evidence.

Mr. BROWN (of U. S. Engineers). Off the record, I understand we have to go through the Secretary of War before we can make that available.

Mr. JAMES. In that case I will withdraw the request. I don't think it is worth that much.

Q. Mr. Carpenter, I believe that you stated that since the operation of the Winfield Dam the stage had never been higher than 574 around South Charleston. Is that correct?

A. You mean under our control?

Q. Yes.

A. I didn't mean it that way—if I said it even I didn't mean it.

Q. What did you mean?

183 A. I didn't know as I said it at all.

Mr. BOYD. May I suggest that we are going to put in calculations of the pool level, if that is what you want?

Mr. JAMES. We understood him to make that statement, and we didn't understand it, because of course it is common knowledge that the pool has been much higher than that on several occasions.

The WITNESS. That would be right, too, but I don't remember making the statement.

By Mr. BOYD:

Q. That statement is not correct, is it, Mr. Carpenter?

A. Yes, it is correct.

Q. It has been above 574?

A. Yes.

(Witness stands aside.)

(Whereupon, at 5:01 o'clock p. m., Court adjourned until 10:00 o'clock the following day.)

THIRD DAY

Wednesday, June 7, 1944, 10:00 o'clock A. M.

Court met pursuant to adjournment of yesterday.

Mr. BOYD. If the Court please, we have agreed on a stipulation which I would like to put in the record.

Stipulation

Mr. JAMES. The plaintiffs, Dickinson and Withrow, without conceding the materiality of such testimony, stipulate and agree that Walter T. Leonhart is a competent witness, and that if present he would testify that the total cost of the London locks and dam was $2,939,630.33, that the total cost of the Marmet locks and dam was $2,742,368.29; that the cost of the Winfield locks was

$2,135,275.63, and the cost of the Winfield dam was $1,995,548.70, making a total cost for Winfield locks and dam of $4,130,824.33. Said plaintiffs further stipulate and agree that the Court may treat this data as evidence in this case as though so testified by said Walter T. Leonhart, but subject to a motion on behalf of said plaintiffs to strike said evidence, and each part thereof, on the ground that it is immaterial to the issues involved in this consolidated proceeding.

The COURT. The court will reserve a ruling on that motion until later.

Mr. BOYD. If your Honor please, Mr. Carpenter, the last witness on yesterday, has told me that he became confused in the course of his testimony in trying to translate foot stages into elevations, and believes that he has made some misstatements and given
184 some erroneous answers in the effort to make that translation, and he would like to resume the stand to explain that,

The COURT. All right.

JOHN E. CARPENTER recalled, testified as follows:

Direct examination by Mr. BOYD:

Q. Mr. Carpenter, what do you use as controls in the operation of the dam?

A. We use a telemark or gauge at Old Lock 6, and the one at the dam.

Q. On the one at the dam, what stage is normal pool level?

A. Eighteen feet.

Q. Can you translate eighteen feet into elevation?

A. That would be 566.

Q. What is the normal pool stage in foot stage terms at old lock 6?

A. Seventeen and nine-tenths.

Q. In your operation of the dam, when do you first start to raise your gates?

A. As soon as the water at old lock 6 becomes higher than normal or more than the turbines can control—that is, the hydro-electric plant can use.

Q. If the water reaches a stage above normal at the dam gauge, do you start to raise the gates then?

A. Yes, sir.

Q. That happens sometimes, does it, that the water reaches a stage above normal at the dam?

A. Quite often.

Q. Before it reaches a stage above normal at lock 6; is that correct?

A. Quite often do that, yes, sir.

Q. Is that because Coal River and other streams empty in below lock 6?

A. That's right.

Q. What is the purpose of raising the gates at the dam when a stage above normal is indicated by the gauge?

A. That is to control the water in the pool from the dam to the point we are getting the water, or keeping it normal as long as we can.

Q. So that you raise the gates in an effort to maintain a stage at the dam or throughout the pool at 18 feet—the equivalent of 18 feet at the dam?

A. That's right, the equivalent of 18 feet.

Q. Then as the pool rises, as indicated by your gauges, do you continue to raise the roller gates?

A. Yes, sir.

185 Q. And what is the effect of raising the roller gates on the pool and the dam? Will you please describe that completely?

A. When we have sufficient water to commence raising the gates, naturally that would lower the stage at the dam. We continue to do that until our control point, which is old 6, reaches a stage of 25 feet, but we are at that time either out of the water or a stage of 12 feet on the gauge at the dam.

Q. A stage of 25 feet at dam 6 would be how many feet above normal pool in terms of foot stages now?

A. That is about 7 feet, or 6½—something like that.

Q. And at that stage your gates are out of the water, or the water level at the dam has dropped to a 12-foot stage?

A. That's right.

Q. So that is it a fact that when that point is reached in the raising of the gates you have substantially open river conditions at the dam?

A. That's right.

Q. After you pass that point in the raising of your gates, do you have any control over the river?

A. Not after that, no.

Mr. Boyd, I think that answers questions, sir.

Cross-examination by Mr. James:

Q. Mr. Carpenter, how far is it from old lock 6 to the Winfield Dam, in miles?

A. (Referring to paper.) About 25 miles—approximately 25 miles.

Q. Twenty-five miles?

A. Yes, sir.

Q. You said normal pool at old lock 6 is 566 feet?

A. That is right.

Q. And normal pool at the Winfield Dam is likewise 566 feet?

A. That's right.

Q. You say you don't raise the gates at Winfield unless the water is too high for the turbines to take care of it?

A. I don't quite get that.

Q. Well, the turbines down there function normally and properly as long as the stage at Winfield is not above 566?

A. No, they function longer than that.

Q. When it is above 566?

A. It don't get above 566 at the dam, if that is what you are talking about.

Q. You say it doesn't get above 566?

A. Not at the dam, when you are operating it.

Q. Well, the water sometimes gets higher than normal pool at Winfield?

A. It does when you take the rollers out; yes.

186 Q. Until it gets higher than 566 due to excess water, you leave the gates in place?

A. No; the gates are always in operation at 566; never above that at the dam.

Q. Do you raise the gates when the water at the dam is below 566?

A. Yes, sir. Do we raise them.

Q. Yes.

A. Yes, sir.

Q. What did you mean by saying that you didn't disturb the gates as long as the turbines could take care of the water?

A. I meant when a small amount—a smaller raise in the river, they don't run full capacity at all times.

Q. They can operate normally up to a full pool stage of 566 at the dam, can they not?

A. Yes.

Q. It is entirely possible for the stage, in time of a slight rise in the river up-stream—it is entirely possible for the stage to be normal at Winfield and several feet high at South Charleston, is it not?

A. That is possible, but it has not occurred lately.

Q. I will ask you as a general proposition, isn't the pool usually higher, even in normal times, at South Charleston than it is at Winfield?

A. No, sir.

Q. Then how do you have a current running from South Charleston to Winfield over a distance of 25 miles with no incline at all?

A. Wouldn't your hydro-electric plant, when it is using all the water in the river, give you a current?

Q. That is drawing it down?

A. Why sure, passing it on.

Q. Are you saying that that is the only occasion or explanation of the current in the river in normal times?

A. It is the only possible one that I would know. We know the gates are all down; there is no place else for the water to go only through this plant.

Q. And you are stating that in normal times the pool at South Charleston will be no higher than it is at Winfield?

A. In normal times?

Q. Yes; with a normal stage.

A. A pool that is normal couldn't be anything else than that.

Q. Let's check your status of normality. Your statement is that you will have an elevation of exactly 566 at South Charleston and the same thing at Winfield?

187 A. I wouldn't say that; I wouldn't say exactly.

Q. There may be three or four feet difference over a distance of 25 miles, may there not?

A. No; I don't think so.

Q. It was stipulated here yesterday that in acquiring flowage easements above normal pool or above 566, the Government started out with a distance of 3 feet at Winfield, but as it acquired easements further upstream it acquired as much as 8½ feet above 566. Now, does it occur to you that there is an explanation of it needing a higher margin of safety 25 miles away from the dam than it needs right at the dam?

Mr. BOYD. I object to that. The stipulation dealt with extraordinary conditions and maximum flows. The question which is being asked to be explained dealt with normal conditions.

Mr. JAMES. Wait just a minute. The stipulation only dealt with the extent of the flowage easements acquired. That is far as the stipulation went.

The COURT. I will overrule the objection. I don't know whether this witness is qualified to answer or not, but if he is I will permit him to answer the question.

By Mr. JAMES:

Q. Do you understand the question?

A. I know what you are talking about, I think. Go ahead.

Q. Well, what is your explanation for the necessity of a higher flowage easement at South Charleston than you need at Winfield?

A. In the first place, when the water gets to Charleston when you have a rise in the river, it gets there first; you can control it further away from it. That is one reason. And then you have

Elk River and other rivers to pop it up—you wouldn't have control of it that far away.

Q. But at the same time it admits that it is higher here at South Charleston in time of high water than it is at Winfield?

A. In high water, that could be; it would have to be, because your water is getting to you.

Q. Do you, in the operation of the Winfield Dam, remove the gates entirely whenever the stage at South Charleston is above 566?

A. No. Above 566 it is normal in position.

Q. I said when it is above 566 at South Charleston.

A. If it is above far enough, yes.

Q. You raise the gates entirely?

A. Raise them and control the water to that point up to 569—seventy-three, I think it is.

188 Q. Whenever the gates are raised completely, the turbine or power plant has to stop, doesn't it?

A. That's right.

Q. Now you want to tell us that every time the stage at South Charleston is above 566 the power plant at Winfield has to shut down?

Mr. BOYD. No; he didn't say that.

A. No, I don't.

Mr. JAMES. Wait just a minute. He told me that he raised those gates completely at Winfield whenever the stage at South Charleston was above 566.

Mr. BOYD. No, he didn't say that.

Mr. JAMES. I understood him to say that.

The COURT. Well, he said it, but then he qualified it; he said he controlled the gates in a way to maintain the stage.

By Mr. JAMES:

Q. Then you mean that then they are only partially raised?

A. We partially raise them and reduce the head or stage at the dam to control at the point of old Lock 6.

Q. Do you know, from your viewpoint, why it is so necessary to retain that pool at South Charleston at 566 when you have a flowage easement up to 574?

Mr. BOYD. I object to that. There is no showing that we have any flowage easement up to 574.

The COURT. Overruled.

Mr. JAMES. Since you have a flowage easement, or the Government has acquired a great many flowage easements up to 574 at South Charleston, why is it, then, that you say you are under instructions never to let the water rise above 566 if you can control it by raising your gates at Winfield?

A. I don't have any instructions like that.

Q. Didn't you say here yesterday that the general instructions were to operate your gates at Winfield in accordance with the stage at South Charleston, and that if it got above 566 at South Charleston the instructions were to raise your gates and draw the water down?

A. I think I said if the hydroelectric plant couldn't take care of it and it continued to rise; yes.

Q. That is what I want to know; what do you mean by saying if the hydroelectric plant couldn't take care of it?

A. Well, use the water that is in the river.

Q. It can always use the water as long as the pool at Winfield is not above 566, can it not?

A. No; not always.

189 Q. Why can't it? If you have got a normal pool at Winfield, why doesn't the hydroelectric plant take care of it?

A, The hydroelectric plant is automatically controlled by the stage.

Q. Well, it function normally at 566?

A. Anywhere in—from zero to that—but where they don't have enough head to operate——

Q. Well, I say the hydroelectric plant functions normally at normal pool, 566, at Winfield?

A. Very well.

Q. And takes care of all the water?

A. No; not always.

Q. Well at what stage at Winfield can the hydroelectric plant take care of all the water?

A. Well, any surplus water over normal—in low water conditions they won't function, some of those turbines, down as low as 25 percent.

Q. You are talking about low water now?

A. All right.

Q. We are talking about the stage at which your power plant can take care of all the water, using your terminology—high stages, not low stages.

A. I don't know how much—where the stage would be that they could take care of all of it.

Mr. JAMES. I think that is all your Honor.

Redirect examination by Mr. BOYD:

Q. Mr. Carpenter, isn't the problem to the power plant and its operation a question not of stage but of flow?

A. Yes.

Q. So that regardless of the stage at the dam, the question is whether the flow is greater or less?

A. That's right.

Q. So that the stage at the dam may be at one level or another and the hydroelectric plant may or may not be able to take care of it, depending on the flow of the river?

Mr. JAMES. If your Honor please, I think this is going just a little far with his own witness.

The COURT. Well, I will overrule the objections to it. The questions are leading, but I think probably necessary.

A. That's right. It depends on the flow.

By Mr. BOYD:

Q. When the river reaches a stage at the dam exceeding what would be elevation 574, a 26-foot stage, do you have any control over the river?

A. What was the elevation?

190 Q. When the stage at the Winfield Dam reaches or exceeds 26 feet, do you use the dam to control the river?

A. You mean the 566 elevation?

Q. No, I am talking in foot stages. When the stage at the dam reaches or exceeds 26 feet, do you have any control over the river?

A. At that stage, at 26 feet, the water is over our lock-walls.

Re-cross-examination by Mr. JAMES:

Q. Mr. Carpenter, when the pool at Winfield gets above, say, 574, at Winfield, do you open up both ends of the lock chambers?

A. No, sir.

Q. Those usually remain in place.

A. Yes.

Q. You do raise the roller gates?

A. At 574?

Q. Yes, or perhaps lower than that.

A. It never gets that high at the lock.

Q. You mean it never gets above that elevation in time of flood?

A. With the gates in. You asked about——

Q. You mean the gates are up?

A. The gates are up, yes.

Q. Now, in time of flood—more than high water, in time of real flood—the dam, with the lock chambers closed and the piers, still forms somewhat of an obstruction in the river which would cause the stage upstream to be higher than it otherwise would be in the absence of that dam structure, wouldn't it?

A. They tell me that one-half a dead head, they call it—engineers call it a dead head—1½ feet over.

Q. Where?

A. At the dam.

Q. And how much upstream?

A. Oh, you have to figure your slope. It will change; probably be a mile or two miles.

Q. And it will be greater the further upstream you went?

A. Yes.

Q. But you would have an increase in the elevation due to the structure, that is, the lock chambers and the piers in the river?

A. You have about a foot and a half at the dam.

Q. And that would not increase upstream?

(Witness shakes his head.)

Q. Water runs on level land, then?

191 Mr. BOYD. Will you answer verbally? Shaking your head, the reporter can't get it.

The WITNESS. Yes.

Redirect examination (resumed) by Mr. BOYD:

Q. The locks are to the side of the dam, and on fast land before the dam was built, are they not?

A. Beg your pardon?

Q. Where are the locks situated with relation to the old pool levels?

(No answer.)

Q. Do you understand the question?

A. No, I don't.

Q. Are the locks located within or outside of the old pools maintained by the old system of locks and dams?

A. You mean the locks would sit farther in shore? Is that what you mean?

Q. I am asking you.

A. Well, they are set in shore, one of them is, and the other is about on a line from over—well, it is out in the old pool slightly.

Q. Do you know how far?

A. No, I wouldn't.

Q. Do you know approximately?

A. Well, I would say a half of the width of them, probably 30 or 40 feet.

Re-cross-examination (resumed) by Mr. JAMES:

Q. Do you say that at least one of your lock chambers at Winfield is back of what used to be contour 554—well, down there it would be lower than that—but back of the old pool?

A. I think so.

Q. Are you sure about that?

A. Pretty sure.

Q. What about the other, the Marmet and London dams? You don't say that in that case?

A. They are set in—one of them is.

Q. Well, I have seen those dams and I have climbed all over them before and after, and I wish you would check on that.

A. Were you in the Coffer Dam when they were building it?

Q. No; but I was there while it was being built. One may be further out shore, of course, than the old shore line, but I wish you would get that information and not rely upon your impression, nor mine either. Will you do that?

A. Yes.

(Witness stands aside.)

192 CHARLES E. ROSS called as a witness by the Government, having been duly sworn, testified as follows:

Direct examination by Mr. BOYD:

Q. State your full name.

A. Charles E. Ross.

Q. What is your occupation, Mr. Ross?

A. Hydraulic engineer.

Q. By whom are you employed?

A. U. S. Engineers, Huntington, West Virginia.

Q. Is that the office of the District Engineer in charge of the Kanawha River?

A. Yes, sir.

Q. How long have you been so employed, Mr. Ross?

A. I have been in the Huntington office eight and one-half years.

Q. What are your duties in that office?

A. Principally the analysis of the river gauge records to determine flood stages, frequency of flooding, where the water came to in the past for the length of the Kanawha River.

Q. Do you have any duties in connection with making studies and determinations for the operation of dams in the Kanawha River?

A. Yes, sir.

Q. What education and experience have you had that qualifies you for such studies?

A. I am a graduate civil engineer from the University of Missouri.

Q. And your experience has been confined to that in the office of the District Engineer?

A. I have had thirteen years' experience all together with the Government on this particular type of work, both in the St. Louis and the Huntington offices of the War Department.

Q. In the course of your employment did you make hydraulic studies upon which the operating instructions for Winfield Dam are based?

A. Yes, sir.

Q. What was the purpose of those studies?

A. The purpose of those studies was to provide a set of instructions so that Winfield Dam would be operated to produce a sufficient depth of water for navigation at all times.

Q. And what depth of water is that in the Winfield pool?

A. The project depth for the entire Kanawha River is 9 feet.

Q. And what elevation would that be in normal conditions of Winfield pool?

A. Normal pool elevation of Winfield Dam is elevation
193 566.

Q. That is at the dam?

A. Yes, sir.

Q. Under normal conditions is there a slope or back water curve within that pool?

A. Under normal conditions—normal pool stage among river men is usually taken to mean flat, and for normal pool stage there is practically no slope, but at other times there is slope in the pool, depending on the flow into the pool from up above.

Q. Will you describe briefly how your instructions, the instructions based on your studies and data, direct the operation of the Winfield Dam and the effects——

Mr. JAMES. If your Honor please, we can't hear the question back here.

Mr. BOYD. Will you read the question, please?

(The question was read.)

Q. (Continuing.) Of those operations on the pool level above the dam?

A. The operating instructions set forth an order of operation for each of the rollers. The [redacted] six rollers, numbered one to six; and from certain model [redacted] that were made, it was determined that it was more desirable to open first of all, we will say, roller No. 3 when only one roller was required—that is, partially opened—and when two rollers were required to be partially open to pass the flow of the river, the instructions are set up so that the lock master knows which rollers to open and the amount to open them; and the general effect of following the instructions is to maintain elevation 566 at the dam until there is sufficient flow

in the river to naturally maintain a sufficient depth for navigation in the upper end of the pool, and when there is enough head water to maintain this depth the rollers are raised clear of the water and we no longer have any control over the water above Winfield Dam.

Q. I understood you to say that when the river reaches that stage the rollers are raised. You heard Mr. Carpenter testify that you start to raise them up before they reach that level. Is that correct?

A. Yes, sir; the raising of the rollers is a gradual process. For example, we never raise one roller and leave it wide open, for the simple reason that it would release a wall of water 26 feet high immediately below the dam, and it would create bad waves downstream and tear barges loose from moorings, and these waves continue for long distances downstream; and the idea of manipulating the rollers is to make the change from regulated or pool stage to open river conditions in a gradual
194 manner which will spread the flow entirely across the river instead of concentrating it along one bank or the other bank.

Q. Have you made any studies about the effect of the operation of the dam on the pool levels behind the dam in times of high flow?

A. Yes, sir.

Q. Can you tell me what those stages show with respect to the effect of the dam on land in the vicinity of South Charleston and, if you can, with specific reference to the Dickinson and Withrow lands which are involved in these suits?

A. We attempt to maintain normal pool of 566 at the dam at all times for the benefit of navigation, and during extremely low flows it is practically the same elevation at old Lock 6 and at the Winthrow and Dickinson properties. Now, the water elevation varies according to the amount of flow coming into the Winfield pool, say from the Elk River or from on up above, and we regulate all flows of less than 80,000 second-feet, that is, we cause these flows to vary to different heights until the natural flow of the river increases to 80,000 second-feet or greater; by that time we have the rollers raised clear of the water at the Winfield Dam and we are no longer regulating the flow of the river.

Q. When the natural flow of the river reaches 80,000 second-feet, would that always reach the same elevation with the gates out of the water?

A. At what particular point on the river?

Q. At the Winfield Dam.

A. Well, 80,000 second-feet can be passed at Winfield Dam at several different elevations. The lowest elevation at which we can pass 80,000 second-feet with the rollers clear of the water is 12 feet on the gauge, or elevation 560, and that necessitates a draw down of 6 feet at the dam. Now, there might be a time when we would not be able to get the rollers completely clear of the water before 80,000 second-feet was at Winfield Dam, and it might be necessary to pass 80,000 second-feet at elevation 566, or normal pool stage. That is a possibility, but that has never happened yet.

Q. You say that it might happen. Under what conditions would it happen?

A. If communications were broken down and we were unable to receive reports from our observation stations in North Carolina and Virginia and in the upper reaches of the Elk and Gauley and Greenbrier Rivers.

Q. In the normal operation of the dam according to instructions, would it ever have the effect of raising the water to 574 at the dam?

195 A. Not under normal operating conditions, but it might be possible under the conditions which I have just mentioned, to pass 80,000 second-feet at normal pool stage, or elevation 566, at the dam.

Q. But that would result only from a collapse of communications or some other similar cause?

A. That's right, which would be extremely unusual.

Q. Are the instructions designed to produce that result under any circumstances?

A. I don't understand you.

Q. As the instructions are framed, assuming that there is no breakdown in the communications or other cause, would the water ever be raised to 574 at the dam?

A. No. Under normal conditions, 80,000 second-feet would pass Winfield Dam at a stage of 12 feet on the gauge, or elevation 560, or 6 feet below normal pool stage.

Q. Have you made any studies and calculations of the pool level at the Dickinson and Withrow properties under those conditions that you have just described?

A. Yes, sir.

Q. What do they show?

A. These studies show that under normal operating conditions when we pass this regulated flow of 80,000 second-feet at Winfield Dam, at elevation 560, that the high elevation on the Dick-

inson property would be elevation 572.1, or 6.1 feet above the normal or flat pool stage.

Q. What would be the cause or causes of the rise in the water at the Dickinson property under the conditions you have just described?

A. Well, that would be due to the natural flow of the river. In other words, if Winfield Dam were not in existence the water would naturally and normally rise to elevation 572.1 on the Dickinson property.

Q. Have you available to you the hydrographic records of the Kanawha River for past years? I don't mean in the Court Room. Have you had access to them?

A. Yes, sir.

Q. Have you made any studies of them and any tabulations about river stages and river levels?

A. Yes, sir.

Q. Do you have those with you?

A. Yes, sir.

Q. Will you produce them, please, the tabulations?

Mr. JAMES. Mr. Boyd, are those the tabulations that are attached to the pretrial conference order?

196 Mr. BOYD. No; these are some others that have been made.

A. I made a tabulation of the open river rises at the Dickinson property which rose to or went above elevation 574, and I took a 15-year period, not any particular period, but just a 15-year period to illustrate what has happened in the past.

Q. Do you have copies of those?

A. I believe I gave you all the extra copies.

Q. I show you copies of certain documents. Can you identify those?

A. These are carbon copies of the tabulations of river stages and elevations and the dates which I made.

Mr. BOYD. I offer those in evidence.

GOVERNMENT'S EXHIBIT 1

The papers referred to were admitted in evidence, marked as above indicated.

[Government's Exhibit 1 is in words and figures as follows:]

197 *Kanawha River, W. Va., Winfield Pool, Parcel No. 1038A, Mile 53.2. William Dickinson v. United States of America. Civil Action File No. 278. Open river rises which rose to or went above the 3-foot easement line at elevation 574.0 Period considered—1926 to 1940, incl.*

Date	Stage in feet at Lock No. 6	Elevation at Lock No. 6	Elevation at Parcel No. 1038A	Height above easement line
January 20, 1926	27.00	574.90	574.20	0.20
January 23, 1926	31.75	579.65	578.95	4.95
November 17, 1926	35.50	583.40	582.70	8.70
December 23, 1926	35.75	583.65	582.95	8.95
December 27, 1926	31.20	579.10	578.40	4.40
February 21, 1927	29.00	576.90	576.20	2.20
February 24, 1927	30.40	578.30	577.60	3.60
May 1, 1928	30.00	577.90	577.20	3.20
March 1, 1929	31.40	579.30	578.60	4.60
March 7, 1929	32.30	580.20	579.50	5.50
October 3, 1929	37.25	585.15	584.45	10.45
November 19, 1929	35.50	583.40	582.70	8.70
1930—None	00.00	000.00	000.00	0.00
1931—None	00.00	000.00	000.00	0.00
January 31, 1932	27.40	575.30	574.60	0.60
February 5, 1932	36.75	584.65	583.95	9.95
March 29, 1932	31.20	579.10	578.40	4.40
July 6, 1932	33.80	581.70	581.00	7.00
January 22, 1933	28.80	574.70	574.00	0.00
March 21, 1933	31.50	579.40	578.70	4.70
March 5, 1934	37.90	585.80	585.10	11.10
March 29, 1934	29.70	577.60	576.90	2.90
January 24, 1935	35.40	583.30	582.60	8.60
March 13, 1935	33.00	580.90	580.20	6.20
March 26, 1935	33.20	581.10	580.40	6.40
April 2, 1935	32.60	580.50	579.80	5.80
January 5, 1936	28.90	576.80	576.10	2.10
February 16, 1936	34.80	582.70	582.00	8.00
March 18, 1936	38.90	586.80	586.10	12.10
March 26, 1936	36.00	583.90	583.20	9.20
April 7, 1936	32.60	580.50	579.80	5.80
January 22, 1937	34.60	582.50	581.80	7.80
January 26, 1937	32.80	580.70	580.00	6.00
October 30, 1937	40.80	588.70	588.00	14.00
1938—None	00.00	000.00	000.00	0.00
February 1, 1939	28.90	576.80	576.10	2.10
February 4, 1939	40.05	587.95	587.25	13.25
April 17, 1939	30.70	578.60	577.90	3.90
April 22, 1940	32.14	580.04	579.34	5.34
June 29, 1940	29.95	577.85	577.15	3.15

* Highest stage reached since January 2, 1919, when the river reached a stage of 43.6' or 2.8' higher than the rise of October 30, 1937.
The maximum flood of record at Parcel No. 1038A occurred September 1861 and reached elevation 601.6 which is equivalent to a stage of 54.4' at Lock No. 6.
The flood of October 30, 1937, was the 10 highest of record during a 76-year period of record.

198 Q. Mr. Ross, the tabulation which you have made is entitled, "Kanawha River, West Virginia, Winfield Pool, Parcel No. 1038–A, Mile 53.2, William Dickinson versus United States of America." Does that mean that the tabulation deals only with the Dickinson land?

A. This tabulation gives the elevation of old Lock No. 6 and the Dickinson land. That's right; this particular tabulation has to do particularly with the Dickinson property.

Q. Would there be any substantial difference between the Dickinson and Withrow properties, in your opinion?

A. The Dickinson property, the stages there would be about three-tenths of a foot less than what I have shown for the—that is, the Withrow property would be three-tenths of a foot lower than the stages at the Dickinson property; it is downstream.

Cross-examination by Mr. ANDERSON:

Q. Mr. Ross, you have referred to 80,000 second-feet regulated flow. At what times does the river either go above or below that flow?

A. Most any month of the year it is liable to go above that flow, but the only time that it actually does is when there is sufficient rain up above there to create that—naturally create that.

Q. Then 80,000 second-feet gives the normal flow of Kanawha River?

A. No, sir; the normal flow would be an average flow. It wouldn't be that much, but I couldn't tell you how much it would be.

Q. Why, for the purposes of your testimony, did you pick this particular figure of 80,000 second-feet?

A. That is the natural discharge which will produce a sufficient depth of water for navigation. Any discharges below 80,000 second-feet must be regulated in order to produce a sufficient depth for navigation.

Q. By "regulated" you mean impounded?

A. Yes, sir.

Q. For what purpose was the Winfield Dam constructed?

A. For the purpose of providing a sufficient depth of water for navigation.

Q. That is the sole purpose?

A. That was the sole purpose at the time it was constructed. There is a power plant there which produces power, and the power plant was constructed at a later date, but the prime purpose is for navigation.

195 Q. Is Winfield Dam used in connection with any other dams or river improvements to regulate floods?

A. It has no value as a flood control dam.

Q. Then the Government operation of that dam is solely for the purpose of navigation, and incidentally contributes to the hydroelectric plant?

A. That is correct.

Q. On this tabulation of high water that you introduced in evidence, you show the stage in feet at Lock 6. You also show the elevation at Lock 6 and the elevation at Parcel 1038–A, which is the Dickinson property, and then the height in feet above the easement line. The easement line referred to there is what elevation?

A. 574.0.

Q. From January 20, 1926, up until May of 1937, how many times had the water gotten above the easement line, that is, at the Dickinson property, as shown by your chart?

A. Thirty-one times.

Q. Since May 1937 how many times up to the time of the extent of your chart had the water gotten over the easement line?

A. Six times.

Q. Mr. Ross, in your testimony as to the operation of the gates at the dam, you outlined the procedure whereby the dam is operated in such a manner as to create a head of water, because of waves which might be created. Why is the dam operated so as not to create waves below the dam?

A. That is so that tow boats will not be torn from their moorings and will be able to proceed upstream and always be under control.

Q. Is there any other reason why the dam should be operated so as not to create waves other than the possible damage to tow boats?

A. Well, it creates fluctuations in the pool of Gallipolis Dam in the Ohio River, and it would require constant manipulation of the rollers to prevent normal pool stage at Gallipolis Dam on the Ohio River from being exceeded.

Q. Would not waves also damage shore installations?

A. I believe the waves would that would be caused by opening the roller wide open.

Q. And would not waves also tend to cause the shore to wash and to cause unnecessary and undue erosion?

A. Below Winfield Dam. Under conditions like that, they would.

200 Q. Is it not a fact that waves, no matter what the cause may be, tend to erode river banks?

A. I believe that is correct.

Mr. ANDERSON. That is all.

By the COURT:

Q. Mr. Ross, you have spoken of the easement line as being the line of 574 feet elevation, and I believe either you or some other witness spoke of the normal stage as being 566. What is the purpose of having the easement line up at 574?

A. 574 is the maximum height to which we can cause the water to rise by manipulating Winfield Dam.

Q. I understand that that is the description of the line, but I am asking you the purpose of having an easement line at 574 rather than stopping at 566.

A. Well, in this 8-foot area of water—the stage of the river will rise and fall due to the manipulation of the dam. Above 574 we have no control over the river and the water will rise to the same elevation as it did before the construction of the dam.

Redirect examination by Mr. BOYD:

Q. Mr. Ross, you were asked a question in which it was stated that you chose 80,000 second-feet for your testimony. Is it correct that you chose it for that purpose?

A. No; by measuring the discharge of the river it is a fact that 80,000 second-feet will produce a natural depth of water.

Q. Was not 80,000 second-feet the flow of water determined long ago for the purposes of the designing of the dam and its operation?

A. Yes, sir; that figure wasn't just for flowage acquisition purposes. It was also for the hydraulic design of the dam.

Q. Nor was it for the purpose of your testimony here today?

A. No, sir.

Q. A moment ago you said that 574 is the maximum elevation to which we can raise the water. Would that elevation ever be reached by the proper operation of the dam?

A. No, sir.

Re-cross-examination by Mr. ANDERSON:

Q. When and why would it be reached?

A. It could be reached if the rollers failed to operate—if all the operating machinery suddenly failed and we were unable to raise the rollers clear of the water.

Redirect examination (resumed) by Mr. BOYD:

Q. Mr. Ross, with the rollers raised completely out of the water, what effect do the piers and other parts of the dams
201 and locks have on the elevation of the water at the Dickinson and Withrow properties, if you know?

A. None.

(Witness stands aside.)

JULIAN C. ROGERS called as a witness by the Government, having been duly sworn, testified as follows:

Direct examination by Mr. BOYD:

Q. State your full name.

A. Julian C. Rogers.

Q. By whom are you employed, Mr. Rogers?

A. U. S. Engineers, Huntington, West Virginia.

Q. In what capacity?

A. I am assistant project manager at the present time in charge of land acquisition at the Huntington office.

Q. What are the qualifications required fo your position, Mr. Rogers?

A. In the past I was in charge of the surveys for the Winfield pool, and then I was later brought into the Huntington office and put in charge of the drafting room preparing the property plats for the Winfield and Gallipolis pools, and in addition all the other projects that we have had since that time.

Q. What education and experience have you had in surveying, Mr. Rogers?

A. I have been practicing surveying since I was—for the last twenty years. The only college education I have had was three years I worked in Pittsburgh and went to Carnegie Tech—Carnegie Institute of Technology—at night.

Q. Have you recently had occasion to make a survey and plat of the present water line at the Dickinson property?

A. Yes, sir.

Q. (Continuing.) Described in this suit?

(No answer.)

Q. Have you copies of that with you?

A. Yes, sir.

Q. Will you produce them, please?

(Witness produces papers.)

Q. I show you Dickinson Exhibit 2 and ask you whether there is any relationship in scale or base lines or other matters of that sort between Dickinson Exhibit 2 and the map or plat which you have drawn?

A. Yes, sir; there are.

Q. What are they?

A. The general outline is the same. The old pool elevation is the same location. The elevation of the 566 contour is the same place. The property lines are the same.

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Q. I believe I can shorten this by another question. Did you use the map designated as Dickinson Exhibit 2 or any other reproduction of it in making the map or plat which you are producing here now?

A. Yes, sir.

Mr. JAMES. We can't hear, Mr. Boyd.

A. Yes, sir, I used the information that——

Mr. JAMES. Will you read that question and answer?

(The question and the answers were read.)

A. (Continuing.) This Exhibit 2, the information it was made from, and also I compared the finished plat that I have here with this Exhibit No. 2.

Mr. Boyd. So that the two maps are drawn to the same scale from the same points?

A. Yes, sir.

Q. May I have those copies?

(Witness hands papers to Mr. Boyd.)

Q. Mr. Rogers, what does that map show with respect to the water line on the property before the pool level at the property was raised by Winfield Dam? Does it show that line?

A. Yes, sir.

Q. Does it show the present water line?

A. Yes, sir.

Q. What does it show with respect to land submerged by the raising of the water in Winfield pool, that is, land that is today submerged?

A. It shows two pieces of ground which I have colored—outlined in blue on this map that were below the original pool elevation, and—I will have to correct that. It shows two strips of ground that I outlined in blue that are now below elevation 566 and are now flooded, and they were below 566 at that time, that is, prior to the raising of the pool.

Q. Is there a line on the map which shows what land was below 566 in 1936 but which today is above elevation 566 and above normal pool level?

A. Yes, sir. That is the area outlined in red.

Q. Isn't there another area of land outlined which was below 566 but which is above water today?

A. Yes, sir.

Q. Where are those areas?

A. There is a contour—there is a line marked "566" in parentheses after it "1936" was the contour line prior to the raising of the Winfield pool and prior to any filling being done by Mr.
203 Dickinson, and then there is a contour line further out in the river from that marked "566" in parentheses after it "1944" which was the contour line and the edge of the river when I made this survey, approximately two weeks ago.

Q. What area of the land owned by Dickinson in 1936, before the pool stage was raised by Winfield Dam, is now submerged?

Mr. James. If your Honor please, the plaintiffs object to this line of testimony on the ground that the rights of the parties here are to be determined as of the date of the taking, and it is our position that the matter of reclamation that has gone on since then at the expense of the property owner for which the Govern-

ment is not being charged for is entirely immaterial so far as the issues in this proceeding are concerned.

The COURT. I will reserve ruling on that point and permit it to be offered.

Mr. BOYD. I withdraw the question.

Q. What area of the parcel which is depicted on the map was below contour 566 in 1936 is now submerged?

A. Your question is what area?

The COURT. Total area.

The WITNESS. Total area?

By Mr. BOYD:

Q. The total area below 566 in 1936 which is now submerged.

A. It is still below 566. That area is 0.05 acre, designated, as I said before, by the two blue—two areas outlined in blue, 0.03 acre on the downstream end of the property and 0.02 acre on the upstream end.

Q. Mr. Rogers, there is an area outlined in red. What does that indicate?

A. That area contains 0.02 acre, and was below the old pool level of Old Lock 7 and is now out of water or above elevation 566.

Q. Mr. Rogers, have you had occasion to make any cross-sections of the Dickinson land recently?

A. Yes, sir.

Q. Do you have those with you?

A. Yes, sir.

Q. Will you produce them, please?

(Witness produces papers.)

GOVERNMENT EXHIBIT 2

The papers referred to were offered in evidence, were admitted, marked as above indicated, and the same are hereto attached as a part hereof.

Q. Will you tell the Court how these cross-sections were made and when?

A. These cross-sections were made approximately two
20 weeks ago, and were made by taking sections from the top of the river bank down to the new water's edge and out in the river past the old water's edge every—well, they were at different stations. We originally had cross-sections made in 1941, 1938, and these sections were taken at the same stations as the original sections were taken, and the original ground line as shown on these sections was put on from the topographic survey made in 1936, and with reference to the old ground as shown at the times of these other—taking of these other sections.

Q. Do these cross-sections truly represent the condition of the ground as you found it when you made them approximately two weeks ago?

A. Yes, sir.

GOVERNMENT'S EXHIBITS 3 TO 6

The papers referred to were offered in evidence, and were admitted, marked as Government's Exhibits 3 to 6, inclusive, respectively. The same are hereto attached as a part hereof.

Q. Mr. Rogers, have you made similar cross-sections of the Withrow land?

A. Yes, sir.

Q. Do you have those with you?

A. Yes, sir [producing papers].

Q. Was the cross-section of the Withrow land made in a manner in all respects similar to that made of the Dickinson land?

A. Yes, it was.

GOVERNMENT'S EXHIBIT 7

The papers referred to were offered in evidence, and were admitted, marked as above indicated. The same are hereto attached as a part hereof.

Q. Mr. Rogers, in examining the cross-sections of the Dickinson land, can you determine the present inclination of angle or rise?

Mr. JAMES. Mr. Boyd, I can't hear when you turn your back on us.

Mr. BOYD. I am sorry.

Q. By examination of the cross-sections which you had made, can you determine the present inclination of bank angle of the steepest part of the Dickinson land on the river front?

A. Yes, sir.

Q. What does that show in terms of 1 to 1 or 1 to 2, or such terms as that?

205 A. Of course, it is different for every section, but I would say about the steepest would be where it was down close to the water's edge originally, about 1 to 1 or maybe a little bit steeper in a place or two.

Q. At what point on the lot, that is, going from east to west, would that be?

A. I would say on the upper half of the property.

Q. By upper half you mean east or west half?

A. East half.

Cross-examination by Mr. JAMES:

Q. Mr. Rogers, do you intend your drawing that has been introduced to correctly indicate the location of the Dickinson house?

A. As it is today?

Q. Yes.

A. Yes, sir.

Q. Did you make a survey to determine whether or not the location of this house is correct?

A. Yes, sir.

Q. I believe you said you used the Dickinson Exhibit 2 for your base lines and other dimensions here?

A. Not altogether; no sir.

Q. Well, did you make an actual survey for this map that you have introduced?

A. Yes, sir.

Q. Well, where was your starting point?

A. The northeast corner of that property.

Q. Northeast corner?

A. Yes, sir. Southeast corner—excuse me.

Q. Marked "Iron Pin"?

A. Yes, sir. Of course, the iron pin is not there now.

Q. Well, what did you use to start from if the iron pin is not there now?

A. There is a cross—that point is now out in the new highway—which Mr. Dickinson told me was there and had been put there in place of the old—where the old point was, and then there is another iron pin back of that same line toward the river about half-way to the river, which checked with that point.

Q. Wait just a minute. You say there is a cross-mark out in the paved portion of the street?

A. That's right; yes, sir.

Q. That someone told you was where the iron pin was originally?

A. That's right, sir.

Q. And from that——

A. And I checked that from another iron pin that is on the same property line about half-way between that point and the river.

Q. You don't indicate that on your map here.

A. I don't remember whether I do or not.

Q. Did you also check the location of the house with reference to this map?

A. Yes, sir.

Q. And you found it correct?

A. Yes, sir.

Q. When did you do that?

A. Approximately two weeks ago.

Q. The 1944 water line which you show on your map is the one that you established about two weeks ago?

A. That's right, sir.

Q. And the other, which you have labelled 1936, purports to be the old water's edge, prior to the raising of the pool?

A. Yes, sir; that's right.

Q. Which would be 554.65?

A. That's right.

Q. On your cross-section maps there, Mr. Rogers, when did you get your information for the original base line, or your original bank line?

A. 1936.

Q. And the other one you got just two weeks ago?

A. Yes, sir.

Mr. JAMES. At this point, if your Honor please, the plaintiffs wish to move to strike all of this witness' testimony relative to conditions as they exist now there on the filling of the land or the reclamation of the land, on the grounds that the defendant has stipulated in the pre-trial order the amount of land that was permanently flooded as of the date of the taking, and that the filling that the plaintiff has done since that time, not at the expense of the Government, does not affect the rights of the parties to be determined in this suit. On that ground we think all of this evidence is immaterial.

The COURT. The pretrial order is always subject to modification if the interests of justice require it. This is a legal proposition, the question that has been raised in connection with that situation about the filling, and I will reserve ruling on it until I come to decide the case.

(Witness stands aside.)

C. P. FORTNEY called as a witness by the Government, having been duly sworn, testified as follows:

207 Direct examination by Mr. WILLIAMS:

Q. Will you state your full name?

A. C. P. Fortney.

Q. You are known as Colonel Fortney?

A. Yes, sir.

Q. You are not now on active duty with the Army?

A. I am not.

Q. And you are not regularly employed by the Engineer Corps of the War Department at the present time?

A. I am employed by the Department of Justice at the present time.

Q. The Colonel title does not indicate that you are at present employed by the Engineer Corps?

A. Oh, no; I am retired.

Q. Do you live in Charleston?

A. I do.

Q. What is your profession?

A. Engineering.

Q. How long have you been engaged in that profession?

A. About thirty-seven years.

Q. How much of that time has been spent in Charleston?

A. Twenty-five years.

Q. In your work since you have come to Charleston have you had occasion to study the various soil types along the river bank of the Kanawha River between Charleston and St. Albans?

A. Yes, sir.

Q. Have you found that the soil types are generally the same in that section of the river, or have you found that there are differences in types of soil on various properties?

A. Oh, there is differences, but taking them generally they are enough to kind of work about the same way. There is differences, of course, but—there might be some—a river cliff, you know, where the cliff comes out or where the soil comes out, the soil is generally about the same.

Q. Do you study the soils in this section of the river in connection with bank protection work?

A. Yes, sir.

Q. What was the largest undertaking of bank protection in this section of the river that you have carried out?

A. The Kanawha Boulevard and the section of the street from over near the C. & O. Station on the south side of the river.

Q. How many feet of river bank did that involve?

A. About five miles on the north side and about 4,000 feet on the other.

208 Q. What was that bank protection designed to protect?

A. To protect the river bank and at the same time to take care of the supercharge loads that—well, designed to protect the river bank and at the same time take care of the supercharge that comes on it by reason of the loads on the boulevard.

Q. Because it was protection of the boulevard, it had to give complete protection; is that right?

A. Yes, sir.

Q. When was that work completed?

A. I think the last of it was about 1940. I mean that was the end of it, but it began back in '38.

Q. Since it was completed, has it successfully accomplished its purpose?

A. Yes, sir.

Q. Have you done other river bank protection between Charleston and St. Albans—advised——

A. Yes; that was some time before that. That was prior to 1933, when I was with the State Road Commission working on highways down the river there.

Q. And that was bank protection for the road?

A. Yes.

Q. Have you examined the property owned by Mr. Dickinson that is involved in this case?

A. I have.

Q. When was that examination made?

A. I can't say just exactly the 23rd or 24th of May.

Q. Have you examined the cross-sections of Mr. Dickinson's property that have just been introduced in evidence, prepared by Mr. Rogers?

A. I have.

Q. What did those cross-sections show as to the angle of the bank in 1936?

A. You can get—you can get anything from about 1½ on 1 to about 2 on 1, but the outside—I mean the filled section that is put in there now——

Q. Well, this is just 1936, the original ground line there.

A. It was somewhere between 1½ on 1 and 2.

Q. And that cross-section also shows the angle as of a few weeks ago or at the time you made your survey?

A. Yes, sir.

Q. And what was that angle?

A. Why, that is right close to 1 on 1. It is a little bit in—I have measured it over there with the planometer and it showed about 43 degrees. Of course, 1 on 1 is forty-five, and
209 that would be just a little less—I mean a little greater than 1 on 1, not very much, though.

Q. About 43 degrees in 1944, and, expressed in degrees, what would it be in 1936, approximately?

A. It would range anywhere from about—let me see—[referring to papers] from 1½—from 1—about 34 degrees or 1½ on 1, and 27 degrees, or 2 on 1.

Q. Then it was between 1½ on 1 and 2 on 1 in '36?

A. Yes.

Q. Have you examined the soil on Mr. Dickinson's land?

A. Yes, sir.

Q. What was the character of that soil?

A. It was sandy clay.

Q. Is it the same type of soil all the way up the river bank, or are there differences?

A. There is some little difference in the texture, but taking it by and large I guess it could be classified as that. Of course, as you get down nearer the river there is a little bit more sand in it, I expect. Yes, there is a little bit more sand.

Q. So far as the angle of repose is concerned, the soil would be approximately the same?

A. Yes, sir.

Q. What is the angle of repose for that type of soil?

A. About 2 on 1.

Q. Is it your opinion that the bank in 1936 was stable—that no further slipping of the top of the bank would occur?

A. Well, looking at the cross section, you couldn't hardly say that it was—it had, in some places, especially up near the top of it, you couldn't say that it had—about the best you could say for it—any erosion at that time, it had been arrested—it was arrested. I mean it was quiescent but as time went on, of course, it would naturally get to its natural angle of repose, which would be about 2 on 1. If you take that kind of soil, when you cut it right out, of course it drops off fast, and as you get further back it slows down, and it will take quite a little time when you get to the last stages of it, approaching 2 on 1, it takes quite a little time for it to even up.

Q. Then you would have expected as of that time, some further slipping to occur?

A. Why, sure; yes, sir.

Q. Is it your opinion that the bank was stable at the time you examined the land at the angle it now is?

A. Well, the manner in which the fill was placed on there, I would just like to put it this way, it was rather quiescent.
210 I think there is going to be some further disturbance there, and then there will be some further——

Q. The angle now is even steeper than it was before?

A. Oh, yes; it will even itself up some. The material that is in there is not a very uniform quality—it is a little bit of everything—great large rocks, small rocks, dirt, so the dirt or the sand-clay will naturally go out from under there, and the rock will be just a little while till it kind of slides down and gets in the position where it will be stable.

Q. You heard Mr. Dickinson testify in this case as to the manner in which he made the fill on his land, didn't you?

A. Yes, sir. He started up at the top side and worked down on it, and the usual way of doing that——

Q. He testified, I believe, that he dumped dirt over the bank and then dumped rock.

A. And then dumped the rock over the dirt.

Q. Did your examination of the land there bear out what Mr. Dickinson said?

A. Yes, sir. I would say that that was about the way the fill was made.

Q. In your opinion, is that the best method of protecting a bank at Mr. Dickinson's land?

A. No.

Q. And was that the best method of making a fill?

A. No.

Q. In what respects?

A. Why, in this respect. I would have started it down at the bottom and worked up.

Q. You mean you would start at the bottom of what?

A. Of the soil or the rock. I would start it with rock at the bottom and then work up the slop and compact it as I went up, because you can take what usually causes a slide is an unbalanced condition of the material, and if you remove the toe of it out here, you invite the material up above to come down; and whenever the coefficient of friction, of course, is great enough, it establishes equilibrium; and I would say by starting up here and working up you would have—you see, there is two elements that enter into that, there is friction and cohesion, and as long as the material is torn up the cohesive qualities of the material is out. If you were figuring a retaining wall you wouldn't pay very much attention to the cohesion, but it is noticeable there, in that the dirt is standing more than 2 on 1. When he threw it over he kind of loosened it, and it would naturally take a steeper—an angle somewhere between 1½ to 2; and when he started down here and he worked up, he would have maintained what little he had up there; but by starting at the top he has just invited it to come down. He has loaded it at the wrong place.

211

Q. You mean that part of that dumping dirt over the bank put the load on the natural bank below?

A. Yes; if you take the dirt and throw it out here, and leave it just the same below, you unbalance the load condition. It tends to produce slides.

Q. In your opinion, then, that method has increased the tendency of that bank to slide?

A. Yes, sir.

Q. Where is Mr. Dickinson's house located with reference to the top of the bank?

A. Here it is [indicating].

Mr. JAMES. I didn't catch that, Mr. Williams.

By Mr. WILLIAMS:

Q. Where is Mr. Dickinson's house located with reference to the top of the bank?

A. Why, it is shown on the map that was introduced by Mr. Rogers.

Q. You saw it when you examined the property, didn't you?

A. How?

Q. Did you ascertain for yourself when you examined the property?

A. Yes; I looked at it on the ground, and that seems—the map seems to indicate the same as about where it is.

Q. It is right near the edge of the bank?

A. Yes.

Q. Will you state, in your opinion, whether that was a proper place to construct a house with reference to the edge of the top of the bank, and so forth?

A. If you take a section through there, start at the old water's edge—that was 12 feet below the present pool level, or whatever the old pool was, 554.65—if you start there and you draw a line back about 2 on 1, it will just about hit in there somewhere near the edge of his house.

Q. The front side?

A. Yes; the front side, and then you have got—we would say that that was equilibrium, but you put a surcharge onto that particular piece of property there or on that plane, or whenever you put the surcharge on it of course you unbalance it again, and there would be some either slide or a settlement until equilibrium was again established. It was a little close in there.

212 Q. You believe that the location of the house at that point, then, tended to decrease the stability of the bank at that time?

A. Yes, sir.

(Whereupon, at 12 o'clock noon, a recess was taken until 2:00 o'clock p. m.)

AFTER RECESS

Q. In your examination of Mr. Dickinson's property, did you see some trees below the top of the bank?

A. Yes, sir.

Q. And were brick wells built around some of those trees?

A. There were somewhere just around fifteen; I wouldn't say whether it was just fifteen, but approximately.

Q. Can you describe those wells?

A. They were anywhere from three to four feet in diameter, I judge, and some of them, I think, as much as four feet at least deep.

Q. In your opinion, does the presence of those wells on the river bank or just below the top of the river bank contribute to the slipping and sliding of the bank?

A. Yes, sir; it collects water, and the water has to come out of there somehow, and when it goes out there of course it lubricates and it lowers the friction angle, and rather induces slips.

Q. Water would be collected in those wells during heavy rains?

A. Yes, sir.

Q. Will you please describe the drainage of the surface water from Dickinson's lot?

A. Why, the surface water is now, the best I could say, brought down through a storm sewer, and I think he has a sanitary sewer, and the tendency of that is to go over the river bank or at least a good portion of it right near the edge of the bank, and especially out there in his lot where he has his contractor's equipment, and around the house there. There is some of it would be obliged to go over the bank there.

Q. Then the fact that water runs over the top of the bank contributes to slipping and sliding?

A. Yes, sir.

Q. Did you hear Mr. Plumley testify that he had examined the Government map showing the channel of the river opposite Mr. Dickinson's property and that he had made soundings of the channel and found that the map was almost exactly correct?

A. Yes, sir.

Q. Have you examined the same Government map?

A. Yes, sir.

213 Q. What did it show?

A. That Mr. Plumley was substantially correct, that the set of the current is in towards Mr. Dickinson's property. I mean it is, I would say, about—if you take the whole channel and then measure from the south side out it would be about a fourth of the way across you would come about to where the channel is there.

Q. Is Mr. Dickinson's property located on a straight stretch of river or on a bend?

A. He is in a bend.

Q. Outside or inside?

A. He is outside of the bend.

Q. Does that factor, in your opinion, contribute to the erosion of his property?

A. Yes, sir.

Q. That is because of the direction of the river current?

A. Yes; the current—I mean the velocity of the current, would carry the material away.

Q. How does the south bank of the river at his property compare with the north bank?

A. It is building up on the north side. That is what usually happens—and digging out on the other side. There are probably several causes that has helped to enlarge that island over there, but the general effect of it is to build it up on the opposite side to that b nd.

Q. Is there any systematic method of bank protection on lands upstream from Mr. Dickinson's property, either on the same side of the river or on the other?

A. Yes.

Q. There is a systematic——

A. Not very systematic. Each fellow has fixed it according to his own lights, about the way he feels about it, and some of them maybe contributes to the protection of the bank at the expense of his neighbor, but at least he got what he was after. I mean, he got [illegible]emporary—he just got it stopped for a while, anyhow.

Q. The fact that there is no general plan of protection all the way up the river from there may cause erosion on unprotected land or require more expensive protective measures on land, is that correct?

A. Yes; that would be the general idea of it. Suppose you enlarge on it a little bit—suppose you build a jetty out there, just build it out a little too far, the fellow above you and below you would naturally begin to suffer a little bit.

214 Q. Were you familiar with the general condition of the river banks between Charleston and St. Albans before the construction of the Winfield Dam?

A. Yes, sir.

Q. Was there any erosion of the banks in that stretch of the river before the construction of the Winfield Dam?

A. Yes; it was going on.

Q. Were there any property owners who had constructed bank protection?

A. Yes, sir.

Q. In that section of the river?

A. Yes; quite a few of them had put up some stuff.

Q. Did you hear Mr. Plumley and Mr. Keeney testify concerning bank protection work that they recommended should have been done in 1936?

A. I did.

Mr. JAMES. Mr. Williams, I think you have your date wrong there. I don't think it was 1936.

By Mr. Williams:

Q. Was it prior to the raising of the water?

A. I was in on the road construction, and I would have to know about the river situation pretty thoroughly even before that, and I have been quite well acquainted with it.

Q. In your opinion was the type of protection that they recommended for Dickinson's property a reasonable type of protection for that type property?

A. Well, I think it was a little overdone. Now, for instance, that would have taken care of a road where you had a supercharge and carrying quite a lot of a traffic on the top side—if you were trying to get away from, you know, future maintenance, and the likes of that, where the Government was entering into it and where it needed quite a lot of extraordinary taking care of because of any damage that might happen to the traffic by reason of that vibration and the heavy loads that might go over it. I think they are just a little bit high.

Q. The type of protection that they propose; is that comparable to what you installed here in Charleston?

A. Well, pretty much. The general idea Mr. Plumley had in mind was something similar to that.

Q. What would have been reasonable protection, in your opinion?

A. Well, if you start in and just say that the slope is 2 on 1, if you had graded that in back and grassed it, by putting in a reasonable amount of stone down there at the water's edge—I mean, where it is low water now, 566—and taking care of
215 that particular section of it, that would have arrested it as it is now. Now, if the current away downstream there continues to work, which it has been doing, just as long as—that will take care of it with a reasonable amount of maintenance in just the way that I have described it.

Q. And about how much would that cost? What is your estimate?

A. That would run in the neighborhood of about $2,000.

Q. What are the elements of that cost?

The Court. You mean on the Dickinson land?

A. Yes [witness refers to papers]. The excavation would have been about 2,500 yards, I mean, just to get the trench, and then that would run—we were getting it done for less than 50 cents I mean the boulevard down here cost us quite a little less than that. Then, taking the stone, and you would have about 115 cubic yards at about $2—that is, using the price that we had down here—I mean, that was about the cost when this was coming up—and the seeding would be about 2,270 square feet, and that would

make it in the neighborhood of 50 cents for the excavation, $2 for the stone, and seeding 20 cents would make it in the neighborhood of about $3,000.

Mr. WILLIAMS. $3,000? You said two thousand before.

A. About $2,000. Yes, that's right.

Q. Have you examined Mr. Withrow's property?

A. Yes, sir.

Q. When did you do that?

A. At the same time that I was down there, the latter part of the month, along about the 23rd or 24th or something like that of May.

Q. What is the type of soil in Mr. Withrow's river bank?

A. It is quite similar.

Q. What type is that?

A. Sandy clay—sand clay.

Q. And what is the angle of repose for that type of soil?

A. It would be probably the same.

Q. The same as the Dickinson property?

A. Right now it is standing up fairly straight at rather a high vertical angle, for the reason that there is one place where the cohesive quality of the material is working. One of these days it is going to give away, and it will level out to 2 on 1.

Q. Have you examined the cross-sections prepared by Mr. Rogers on the river bank tract?

A. Yes, sir.

Q. Did you determine the angle of the bank in 1936 from those cross sections

A. Yes.

216 Q. And what was that?

A. Well, as I recall it, it was about the same as the other—some of the sections showed it was maybe somewhere between 1⅛ on 1 to 2 on 1, but generally speaking I would say about 1¾ on some of it there, but the end of it would be about 2 on 1 when you get through with it—I mean, when nature gets through operating on it.

Q. In other words, the angle at that time was greater than the angle of repose?

A. Yes, sir.

Q. Could you say from those cross-sections what is the angle of repose, or the angle of the bank, at the present time?

A. I believe, as I recall it, it is about—if you start at the water edge and measure across it is about between 1½ on 1 and 1¾ on 1. You can measure two or three of them and you can get—the answers would vary from that.

Q. In your opinion, was the bank stable in 1936, and would no further slipping take place at that angle

A. No, it wasn't stable. We might say—the erosion was taking place slowly, but surely. Whether it was being done by the water or whether it was being done by freeze and thaw or by rains and the wind, it would eventually bring it down to about its predetermined angle of about 2 on 1.

Q. Did you examine the Government plat showing the location of the current in the river in front of Mr. Withrow's property?

A. Yes, sir.

Q. And what does that show?

A. It is about similar to the one up—I believe it is—as I recall it, it is practically the same. I mean the set of the current is in towards Mr. Withrow's property.

Q. I believe you testified that the channel was about one-fourth of the distance from the south bank?

A. That's right.

Q. Does that fact contribute to erosion of the river bank tract?

A. Yes, sir. Where the current is setting in—I mean you have got it on the outer curve there—it is taking it out on one side and piling it up some place else, and usually over in slack water—I mean where the water is quiet.

Q. Is there a systematic protection of the banks upstream from Mr. Withrow's property by other land owners—Have they adopted any system?

A. No; they have not adopted any systematic method of protecting it. I believe Mr. Dickinson's protection is the
217 most pretentious one of them, and he has gone a little further with it than anyone—I mean—speaking from the mouth of Davis Creek down. Now, up above, of course, there is quite a variety of different kinds of bank protection.

Q. Does the fact that there is no systematic plan above Mr. Withrow's property contribute to erosion?

A. It could, yes.

Q. Do you believe it does?

A. Yes.

Q. You heard Mr. Plumley and Mr. Keeney testify in this case concerning the bank protection that they proposed for Mr. Withrow's river bank?

A. I did. And that would be about the same answer, only as to Mr. Withrow's property, is about a hundred foot front, I believe, or whatever it is——

Q. One hundred and eighty, I believe.

A. One hundred and eighty is proportioned to the width of the frontage on—

Q. Dickinson?

A. Dickinson's property.

Q. And you would recommend much the same plan of protection for Mr. Withrow as you did for Mr. Dickinson?

A. The general plan, yes.

Q. When you began to testify, I asked you if you were employed by the War Department, and you said you were employed by the Department of Justice.

A. I am in private practice, and employed by the Department of Justice.

Q. You are not regularly employed by the Department of Justice, are you?

A. Oh, no.

Q. Simply to testify in this case?

A. Well, I have just been called in on this particular case.

Cross-examination by Mr. JAMES:

Q. Colonel, I believe you said in designing the riprapping for Kanawha Boulevard in the City of Charleston that that riprapping was to serve two purposes?

A. Right.

Q. One to protect the banks against erosion, and the other purpose was protection against supercharge?

A. That's right.

Q. Am I using the right term?

A. Yes, or if you want that amplified a little bit, it serves as a kind of semi-retaining wall. I mean, you are getting the
218 benefit of that weight down at the bottom to take care of the additional weight on top. That is what that is for.

Q. Your supercharge is your paving and your traffic up on top?

A. Right.

Q. I notice that your actual riprapping, however, stops below the first sidewalk on that river bank; it doesn't extend on up above, which would make it appear that where the supercharge or weight may be reflected is where you do not have your riprapping.

A. The thing, if you will just—since you have described the section, I believe there is a set-in there of about ten feet, isn't there? When I set the thing back that took care of that situation, and the reason for putting the sidewalk down there wasn't totally for beauty, because at that time money was very scarce, and it has made it a little bit cheaper to end it up that way. The real purpose of it, as I say, was of course, to take care of a supercharge, and when you take care of the part and set it in, if you will analyze the stresses in that you will find that setting it back in the ten feet ended the necessity of having it any higher.

Q. Your riprapping doesn't extend more than a fourth of the way up the river bank to the top of the road, does it?

A. From 566 to 585 and 580 to 600, 580 from about 600 would be about—585 from 600 would leave about 15 feet, I believe, and 566 from 585 would leave you about 19 feet.

Q. Above, that does not have the riprapping?

A. This 15 feet from 585 to the top, that is taken care of by——

Q. Seeding?

A. Seeding, yes. But here is another something on that, with the ample protection at the foot down there. I could go to a steeper slope than would normally—than that normally required, because I had it safely anchored. Now, if there was no supercharge or anything like that, and the expense of going inland and going into the—now, let's take the front of the Chamber of Commerce Building—going over there and taking that land or similar land further down—the County Court House property—it was better to kind of work out into the river than it was to try to take too much or try to come over and take part of the County Court House——

Q. But, now, my question is this. The fact that your riprapping only extends up a small part of the river bank indicates that that riprapping was essential to protect against
219 erosion, and the protection against the supercharge is relatively minor, is it not?

A. No; I didn't say that. I said that it served a dual purpose; one of them was to take care of the part of the supercharge and the other purpose was to take care of the erosion. The whole of it you don't see on the surface. That thing is about two foot thick, and then there is about a foot of gravel back of that and then about a foot of sand.

Q. Would you agree that the erosion is the principal purpose of the riprapping?

A. No.

Q. I believe you said you first examined the Withrow and Dickinson properties in May 1944?

A. Something like that.

Q. That is the first time you had ever examined them?

A. Right.

Q. I believe you said that the character of the soil there is such that the angle of repose would be approximately 2 on 1?

A. I believe I said it was 1½ on 1 to 2 on 1, and apparently it looks like it would be about 2 on 1; yes, sir.

Q. Would you agree that the nature and extent of the vegetation would determine the degree of stability of a river bank as much as the character of the soil?

A. No; I don't agree to that. The vegetation aids; it is just one of those retarding agents of erosion——

Q. You don't attribute much importance, then, to vegetation on the matter of stability of a bank?

A. Not a whole lot, but it aids. It is one of those aids that would—here is about what it does. If your river gets up over it—I mean a sudden rise come up and over—up onto the thing—when the water goes back down if you have got the grass or vegetation there it won't bring the soil down with it—I mean begin to slough off—just enough to hold it until the water gets out of it, and when it gets out of it it becomes stable.

Q. Then, Colonel, your point is that the fact that you do not know what the nature and extent of the vegetation was on Dickinson's property and Withrow's property prior to the raising of the pool would not influence your judgment as to whether or not those banks had been stable before the raising of the pool?

A. Well, this is one thing I am certain of. They were not, in the sense that you have in mind, permanently stable; it was just temporary—the action of erosion was just kind of suspended; it was just waiting there until something would
220 occur, a freeze, thaw or rain or the action of the waves or something like that, or further digging down.

Q. Now, Colonel, the owners of these properties and others have testified that there was no erosion for twenty years or more prior to the flooding, and you have said that you had not seen that property prior to May 1944?

A. That's right; I believe I said something like that——

Q. And yet you won't state that in your opinion erosion was going on?

A. Yes, sir; I do.

Q. Despite the fact that you had not seen it?

A. I do, because of the obvious reason, the nature and kind of soil there, it just couldn't do anything else. That is just what happened; it has——

Q. Now, is it your position that there was general erosion going on in the Winfield Pool prior to the raising of the pool?

A. I do. The fact of the matter, it was just——

Q. And the amount of erosion that has gone on since the construction of the Winfield Dam does not differ greatly from the extent of the erosion prior to the dam?

A. Well, the answer to that one divides itself two ways. One of them, the erosion in the bottom of the stream is retarded, for this reason, that the quantity of water passing through the channel is 80,000 cubic feet a second—I believe that is what has been said—and when you raise it up 12 feet, you increase the area, don't you? The area is increased. All right. When the area is increased the velocity decreases, because the area times the velocity

has got to equal the 80,000. All right. You increase the one, you have got to decrease the other. The carrying power of water is the square of the velocity of the current, and if the current is eroding it is digging it out underneath and it is doing the damage where it is going down.

Q. Wait a minute, Colonel. You say by the installation of the navigation dams there you reduce the velocity of the current?

A. Right.

Q. That would undoubtedly be true in the case of the first canalization of a stream.

A. Which?

Q. The first canalization of a stream, but suppose you replaced one set of dams with another set of dams, merely raising the stage a few feet, is it your position that your velocity would be slowed up again?

A. You increased it, I believe, 12 feet, as I recall it, and when you increased it the section there of the river bank is rather
221 V-shaped, if you come up 12 feet you have got a greater area than you have when you were down at 574.

Q. Is that leading you to the conclusion that there is less erosion in the Winfield pool since the new dam was built than there was before?

A. Yes, sir.

Q. That is your view?

A. Yes, and in proof of which, they have—Mr. Rogers and others—examined that, and it has been no change to speak of out there in the channel. Now, what I am trying to get over—maybe I have not made it clear—whether a cut is on a river bank or on the road. I think that thing runs from the bottom of the channel to the top. Let's say it is about 60 feet. All right. Suppose it is just straight up and down 60 feet. All right. There is no question about what is going to happen; that is going to just keep working back until it flattens itself out to about 2 on 1. Take the road situation. I have cut out a lot of them and tried to let it stand as steep as it would; but rain, freeze, and thaw and the general maintenance of the road just flattens her back eventually to what the angle of repose was whether there was any current on there or not. I take it in the end it would work itself down to about that.

Q. Just a minute, Colonel. I want this point straight on the record; let me see if I can get it correct.

A. All right.

Q. Your position is that by raising the pool in the Winfield pool——

A. Right.

Q. (Continuing.) That there has been less erosion of the river banks——

A. No, no; the river bed.

Q. (Continuing.) Than there was before the construction of the dam?

A. No; I said the river bed.

Q. Well, how about the river banks?

A. Oh, well, that is just equalizing itself; when you bring it up the action of the waves and the like of that might hasten the flattening out of what had already been started and what would eventually have happened just aided it in getting there a little sooner; that's all.

Q. Then your opinion is that the raising of the pool stage has at least contributed to the erosion of the river banks?

A. In the sense that it would flatten out to 2 on 1, no, but it has aided it in getting to that point a little sooner. That is about what I said.

222 Q. Over what period of time does it take, in your opinion, for a river bank with soil of the character as you described at Dickinson and Withrow, to arrive at this angle of repose?

A. Oh, good Lord! That would be quite some time.

Q. As much as twenty years?

A. It would be more than that.

Q. Thirty years?

A. It would be more than that. I think of a railroad cut that I worked on back—this is just for example—somewhere up in Harrison County, near Hephzibah Church we cut through some clay. That thing started out fairly straight; that has been about thirty or forty years. That has about reached its angle of repose there.

Q. That is along a public highway, isn't it?

A. No, along a railroad.

Q. Is it your view that it takes about the same time for soil to reach its angle of repose on a railroad embankment as it does on a river bank?

A. Now, if you raise the water up, as I said a moment ago, it hastens its approach to its angle of repose. If the water had not been raised it would have approximated—depending on the amount of vegetation or maintenance that the property owner might put on it—it would have been retarded quite a little depending——

Q. Will you state, in your opinion, how long it takes or would take the river bank at Dickinson's property to reach an angle of repose?

A. Under what conditions?

Q. Under the conditions that exists there from day to day.

A. Now.

Q. Now or during the last forty years.

A. I would say that is—he has already done some things—do you want to take that into consideration?

Q. Let's assume that the first canalization was built in 1893?

A. Right.

Q. At Dickinson's property?

A. Right.

Q. And the second one was built in 1938?

A. Right.

Q. Some forty-five years' difference?

A. Uh-huh.

Q. Is it your view that that period was not enough in which that bank could reach its angle of repose?

A. Yes, for two reasons. One of them, it is taking it down in the bed, and the other, as it was coming out down below
223 it didn't give—and then there was vegetation there to retard it, and by retarding it—that is all you do; you just retard it, but eventually it will.

Q. Would you state to us how long you think it would take?

A. No; that would just be anybody's guess.

Q. You think the amount of vegetation does have a direct bearing upon the stability of a river bank?

A. Oh, I agree to that.

Q. And you don't know how much vegetation there was on Dickinson's bank or Withrow's bank?

A. I know pretty generally what it was, because I have been along, not for the same purpose that I was this last time, but I have been up and down the river there, and I know about what it was.

Q. But you heard the testimony that it had been pretty well cleared off on Withrow's property and that thirty or more trees had washed out on Dickinson's property?

A. I don't know about that. I believe I heard something about that, but that was at the elevation 566, wasn't it? I am asking you if your question includes that you are talking about between 574 and 566.

Q. I believe there is a little dispute as to the exact point to which the vegetation is cleared out, either 574 or about 568—something like that.

A. Well, whatever it was—whatever the clearance was—it was taken out because if they had not taken it out it would have been a menace to navigation, in this: as soon as the water raised up over it, the trees would have died, and the snag boat would have had to go in and fish them out, so you might as well get it over with early.

Q. That in itself contributed to the erosion of what was left, did it not?

A. No, not necessarily, because as soon as you raise the water up you have done something else. The effective height of that wall then changed. What you had was, let us say, from 574 to—we will say it was 600. That would be about 36 feet, wouldn't it? All right. You had a 36-foot differential in height between the water and the other. All right. Now, you have raised the water up to 566, and 566 from the 600 you have got—what was it?—well, anyway, that you have reduced the effective height of the exposed surface by 12 feet. Let's see——

Q. The pool was raised 11.35 feet.

A. 554, wasn't it? Yes, 554 to 600 would be——

Q. 11.35.

A. What say?

224 Q. The pool was raised 11.35.

A. The point I am getting to, regardless—let's just take, you have reduced the effective height by 11 feet, haven't you?

Q. The height of the bank?

A. Yes; you have reduced that—now, when the water gets up there, that water does something; it is a pressure against the—it has a stabilizing effect of its own, I mean, down underneath. Well, just take a dam, for instance: you will say that the difference between head is between 566 and 600 in the one instance and 554 in the other instance. Now, when you raise the water up 11 foot and a little over, the dam is more stable than it was before. The point is, your river bank is working along about the same—somewhat analogous to the case of the retaining wall—I mean the dam.

Q. So you conclude that the raising of the pool has really helped rather than hurt the river bank?

A. Well, in some respects, yes, but it aided the—the bare fact of 556 or 566 getting back to where it ought to—where it will eventually go.

Q. Colonel, I believe you said Dickinson's construction of some brick wells around his trees there had contributed to the erosion?

A. I said it had a tendency to do that.

Q. Do you happen to know when those wells were constructed?

A. That was some time prior to the time that he had the fill there.

Q. Prior to the time of the fill?

A. Yes; he built his walls in there while he was making the fill.

Q. It so happens that those wells were built after the erosion took place.

A. But the point I am trying to get over is that he has got the seeds of destruction sown in there that is going to give him trouble

later on. Let's take right down here in front of the County Court House, we were unfortunate enough not to find the dead end of a sewer, and the water collected in there, and the first thing we know out she went. All right. The only thing to do is to go back and find the sewer and cut off the water. So if you have got water in there in quantities, it does this: you take the mechanics of the soil and you lubricate it with water and it makes it a little bit more fluid.

Q. How much are those brick wells up above the pool?

A. That hasn't much to do with it. What I am speaking about is rain water and other water getting in and filling it in.

225 Q. Did you see any evidences of erosion around those brick wells?

A. No; you wouldn't see it there; that would not be the place you would find it. You would find it some place else where that water come out.

Q. Did you see any of that?

A. No, I didn't; for this reason, that the fill that is put in there is so new that it has not had a chance to show itself up.

Q. Now, Colonel, I think you expressed the opinion that the design of protection worked out by Messrs. Plumley and Keeney was overdone a little bit?

A. Yes, sir.

Q. Too expensive?

A. Right.

Q. Would you tell us how much the riprapping job on the Kanawha Boulevard cost per linear foot?

A. Do you mean for the actual——

Q. Just for the riprapping.

A. Oh! Well, that run about $2 a cubic yard.

Q. How much per lineal foot?

A. Oh, there would be no comparison. Some places in there there was maybe two cubic yards; in other places there was forty cubic yards per foot. All right. Now, for one foot it was $4 and for the other it was $80.

Q. Do you think that was overdone?

A. No, for this reason: In the over-all, as I say, I was doing two things, trying to take care of a situation from erosion, bank protection, and supercharge; and the main trouble with a situation like that is to have a solid foundation. I was trying to get a foundation to take care of that supercharge and what was coming on later.

Q. Colonel, are you familiar with the protective work that was done to protect the river bank in front of the Commandant's home as Armor Park?

A. No; I don't know.

Q. Did you hear the testimony that it was of the same character generally as that proposed by Keeney and Plumley?

A. I believe he said that, yes.

Q. You understood that——

A. I don't think it was wholly necessary, but that was what he wanted, and after all, let's get this——

Q. Then you disagree with the Government engineers on that job?

A. That wasn't the Government engineers; I think that was the Navy.

226 Q. Well, isn't the Navy a part of the Government?

(Witness laughs.)

A. Yes; they build the boats. I think it could have been done for less and probably have given him pretty good service; but here is one thing I wanted to develop, just as you say, for the record. After all, the purpose of putting in riprapping in the one place is utility to meet a certain purpose where a road is involved. Another is the desire of the owner. Now, what does he want? How does he want to fix it? He can fix it so it will be reasonably safe for a very small amount of money, or——

Q. Do you know, Colonel——

The COURT. Let's let him finish.

A. (Continuing.) And then, if you want to, you can let the same property owner go ahead and he can spend maybe five or six hundred dollars a front foot to get something he wants. It is largely up to the property owner. Some of that that we are trying to discuss is a question of what the Admiral wanted or the Commodore wanted down here, in one instance, and what Mr. Dickinson wanted in another, and what would actually have served the purpose.

By Mr. JAMES:

Q. Did you hear the testimony of Mr. Plumley and Mr. Keeney?

A. Yes.

Q. And their testimony was that was what, in their opinion, would afford only adequate protection, regardless of any individual wishes that Mr. Dickinson might have?

A. Well, that is Mr. Plumley's opinion.

Q. You know Mr. Plumley?

A. Very well.

Q. And Mr. Keeney?

A. I know them both very well.

Q. You understand Mr. Keeney has been doing this sort of thing for about forty years?

A. Yes, sir.

Q. Do you think he knows something about river bank erosion?

A. Yes; he knows about it.

Q. Do you think he knows pretty well about how to protect river banks?

A. Yes; he would know how to do it, but he would be somewhat more or less influenced by the desire of the man whom he was doing it for, wouldn't he? For instance, down here——

Q. Just a moment. Is there any evidence that he is doing this protective work for Mr. Dickinson?

227 A. I don't know.

Q. The work has already been done in a different manner, has it not?

A. Whereabouts?

Q. At Dickinson's place.

A. The way he has done it—the way it has been done——

Q. And there is not a chance in the world of Keeney or Plumley getting a job of putting in protective work for Dickinson now.

A. No, I will grant you that, but maybe what he has done will not prove as satisfactory as he hopes, but a lot of that takes a little time to develop, but the manner in which it is put in will be probably more of a handicap than it will a help.

Q. Colonel, I believe what you suggest as protective measures on Dickinson's and Withrow's property would involve some stone down at the bottom?

A. Yes.

Q. And sitting on the river bank?

A. That's right.

Q. How far up would you propose to put the stone?

A. Why, it would be just right in the—just about the elevation 566, and just about what the wave action would be there, would be about two or three feet—something like that.

Q. The plan you have in mind is one designed to be built there now, or after the water is raised, rather than before the pool was raised; is it not?

A. Well it could—the plan that I have in mind could have been done over it, but the way it is now, it is not very much you can do with it other than just leave it alone.

Q. How far up would you extend the stone, under your plan, if it were installed before the pool was raised?

A. About two or three feet.

Q. Two or three feet above the old pool or the new pool?

A. No; the thing of it is this. If I was going to—first, I thought you were talking about fixing it as of the 566 elevation.

Q. We are concerned with a plan of protection as though installed before the river was raised.

The COURT. Protection against the situation, though, after the water was raised, Mr. James.

Mr. JAMES. If your Honor please, our theory of the case is that the protective measures, in order to render the Government liable for the full measure of it, are protective measures put in before the erosion takes place and in time to prevent the erosion.

228 The COURT. I understand that, but that would not have any effect on his opinion as to where the stone work should start, even though it were put in before the raise, put in in contemplation of the raise.

Mr. JAMES. Yes; I understand that.

The COURT. He still may have the same opinion as to starting it at 566.

Mr. JAMES. Oh, I see.

Q. You would start it at 566 whether you put it in before or after?

A. Well, if I knew where the pool level was going to be, that would be quite a determining factor in it.

Q. You think beginning your protective measures there would be sufficient to protect the bank?

A. I do, taking into consideration——

Q. And you would only have five or six feet of the stone?

A. I would slope it back as I told you, 2 on 1.

Q. Would you have a rock toe wall at the bottom?

A. I said I would; yes.

Q. How much?

A. About two or three feet. I mean, enough to take care of the wave action.

Q. And then you would seed the rest of it?

A. That's right.

Q. Have you ever designed or built any river bank protection of that kind on the Kanawha River?

A. Not on the Kanawha, but others, and it worked very well.

Q. I believe you say your plan, though, would require some maintenance?

A. Any of it does, even the boulevard down there. It ought to be so far—it has been in there about six years; I don't think it has had a nickel's worth of maintenance on it; it has stood up; but it had in contemplation some little bit of maintenance—any of it does.

Q. Are you suggesting that this Kanawha Boulevard job would require something like as much maintenance as the plan that you propose?

A. No, the thing of it is this. The plan I proposed if he would have fixed it up something like that, would have about left him —well, it would have about fixed him up so he wouldn't have very

much trouble from there on. He might have had to seed it, and I think if I had been him I think I would have cut the grass to make it look a little like something, and maybe he says he is going to put some roses out there and they wouldn't hurt it.

229 Q. Colonel, you based your prices, I believe, on stone on the prices or cost of this Kanawha River project?

A. About '38 prices; yes.

Q. Colonel, isn't it true that unit prices on a tremendous job like that would be very much lower than any price you could get for a small job such as Dickinson's or Withrow's?

A. I believe it was adduced in the testimony that Mr. Dickinson was putting it in for less—a little over a dolla, or something like that. I will just give him the benefit of the doubt and say it would be about two. I mean whatever he said he was dumping that dirt over——

Q. But my question was that on a job the size of Dickinson's or Withrow's property it will not be safe to estimate costs on a unit basis such as you could get on a tremendous job like the Kanawha Boulevard?

A. Well, I would kind of say yes and no, too. It depends largely on the specifications you write.

Q. Well, per cubic yard for stone riprapping.

A. I will grant you—I said it depended on the specifications. What do you require. I again get back to the idea it is simply up to the desire of the property owner. I based my estimate on what I knew would take care of it.

(Witness stands aside.)

Mr. BOYD. We now offer to introduce a notice to holders of permits, dated July 1, 1936, carrying the acknowledgment of receipt of Mr. Withrow dated July 9, 1936.

Mr. JAMES. We object to the introduction of this. This is a notice to holders of permits on the river front; it is not any notice to property owners on the river bank. We are concerned with property owners here. I have seen that notice, and it is a notice directed to those who had been issued permits for construction projects along the navigation stream of the Kanawha River.

The COURT. What is it a notice about?

Mr. JAMES. A notice that the stage of the river will be raised, and to what extent it will be raised.

The COURT. Well, I presume the only purpose of it is to show that Mr. Withrow had notice at a certain date that there would be a maximum elevation carried through up to 566 feet elevation.

Mr. BOYD. It is also offered for the purpose, your Honor, of showing that the Government, through the District Engineer, gave a notice in unequivocal terms stating the intention of the Govern-

ment to raise the water to the final pool elevation, 566,
230 upon completion of the dam, without the performance of any other condition.

The COURT. Well, I can't see that it makes any difference whether Mr. Withrow got that as the holder of a permit or as a property owner, if he got it. I overrule the objection.

GOVERNMENT'S EXHIBIT 8

The paper referred to was admitted in evidence, marked as above indicated.

[Government's Exhibit 8 is as follows:]

WAR DEPARTMENT

UNITED STATES ENGINEER OFFICE

Huntington, W. Va.

File No. U 8-A JULY 1, 1936.

NOTICE TO HOLDERS OF PERMITS

Subject: Effects of new Winfield Pool on structures constructed under Government permit along the Kanawha, Coal and Elk Rivers.

1. As a holder of a permit which authorized the construction of a structure in the affected area above the new Winfield Dam, in either the Kanawha, Coal, or Elk River, you are hereby notified of the contemplated change in elevation of the pool level which will take place upon completion of this dam.

2. It is expected that this change in elevation will be made during the Summer of 1937.

3. The change in elevation of the water in the pools above the present respective locks will be as follows:

Present Dams, Kanawha River—New Winfield Dam

Dam No.	River mile (about mouth)	Present pool elevation	Proposed pool elevation	Change in elevation
9	25.50	538.40	566.00	Rise 27.6
8	36.22	546.40	566.00	Rise 19.6
7	44.20	554.65	566.00	Rise 11.35
6	54.28	563.15	566.00	Rise 2.85

4. By the terms of the permits issued, any alterations, modifications, changes or removal of structures made necessary by improvements to or in the interest of navigation are to be made at the owner's expense.

5. The proposed change in pool elevations is now brought to your attention so that you may be afforded ample time to effect any modifications necessary or desirable to adapt existing structures to the new pool level before the new dam is placed in operation.

231 6. This notice is furnished in duplicate, one copy for your files and one copy for acknowledgment of receipt by filling in the space provided below and mailing to this office in the inclosed envelope which requires no postage.

7. Your cooperation in this matter will be greatly appreciated.

(S) John F. Conklin,
JOHN F. CONKLIN,
Lt. Col., Corps of Engineers,
District Engineer.

1 Inclosure:
Self addressed envelope.

A copy of the above Notice to Holders of Permits was received by me on the 9th day of July, 1936.

(S) F. H. WITHROW,
Charleston, W. Va.

Residence: Spring Hill, W. Va.

FELIX M. BROWN called as a witness by the Government, having been duly sworn, testified as follows:

Direct examination by Mr. DYER:

Q. State your name, please.
A. Felix M. Brown.
Q. Where do you live?
A. Pliny, Putnam County, West Virginia.
Q. What do you do?
A. I own and operate a farm there, under supervision; I am connected with the bank at Buffalo, West Virginia; and for some time I have been employed by the Department of Justice, lands division.
Q. In what capacity have you been employed with the Department of Justice, lands division?
A. Both as real estate expert and as expert witness.
Q. You own real estate?
A. I own a farm of 514 acres on Kanawha River—bordering Kanawha River. I own two lots and a cottage house in Buffalo, West Virginia, and I own property in St. Albans, West Virginia.
Q. And in what county or counties is your farm?
A. The farm is in Putnam County—My home.
Q. And about what mileage or length of river bank do you own bordering the Kanawha River?

A. Right close to a mile. It is four thousand nine hundred feet plus.

232 Q. How long have you owned that farm and river bank?

A. Well, I have lived on it all my life. I came in possession of it when my father died in 1924.

Q. And you were born—

A. I was born on this farm.

Q. State whether or not in the course of your employment, and also business relations before that time, you are familiar with the river banks from St. Albans to Charleston, West Virginia?

A. I have been. I have traveled by river considerably, and also by roads on both sides of the river.

Q. What is the character of the soil from Charleston to St. Albans as compared with the soil from there on down to your farm?

A. It is all clay loam, as a general rule. Sometimes you get a good deal of clay and very little sand, but most of it is sandy clay loam.

Q. Were you acquainted with and had you observed the river banks on the Kanawha River prior to the elevation of the water by the Winfield Pool?

A. Yes, sir. I have known this bank on the place ever since I was—on the farm at home ever since I was old enough to observe anything, and I have always observed the rest of it, because it was a matter of interest to me.

Q. And have you observed the banks from Charleston to St. Albans since the elevation of the water by the Winfield pool?

A. Yes; very carefully.

Q. Are you acquainted with the erosion which took place, if any, prior to the elevation of the Winfield pool on these banks?

A. I know of it generally.

Q. And do you know of the elevation, if any, which has taken place on the banks since the elevation of the Winfield pool?

A. Yes, sir; I have observed that.

Q. State whether or not there was any erosion on the banks—I am referring now from Charleston down to St. Albans—prior to the elevation of the pool.

A. After high tides in the river we had some slips and so-called erosion. We have always had it along Kanawha River since I have known it.

Q. And what has taken place, then, since the elevation of the water?

A. The same situation has existed; when we have high tides we get some slips, we get cracks in the bank that afterwards results in erosion.

233 Q. Did you ever have any slips or slides on your farm?

A. We have had minor slips and two large ones, taking in something like an acre and a half of ground.

Q. When the larger slips took place in your farm, under what weather conditions did they take place?

A. All slips along our river front down there has taken place immediately after high water.

Q. And when were the largest slips, or part of them?

A. One of the bad ones was in 1913.

Q. Was that before or after the high water in 1913?

A. That was immediately after the high water in 1913, and we had one bad one from high water in about 1918; reached a little above the top of the bank. We had a bad slip then, and we had quite a few minor slips after the 1937 flood.

Q. From your observation and experience, would you state that high water contributes to the slips and slides and erosion on the banks of the Kanawha River?

A. I think it is almost wholly to blame for those things, except where by reason of a bend in the river or islands in the river that swift water might be thrown against the banks sometimes during floods, and that erosion might come from cutting, as it does in a branch or anything like that when it is up.

Q. What has been your experience, Mr. Brown, where you have a bend in the river? What effect does that have on the land on the opposite side of the river?

A. You protect your bank on the inside of the bend and it tends somewhat to build it up, and it is hard on the bank on the outside of the bend, owing to the current and sometimes ice in the river—ice scouring on the outside of the bend is bad.

Q. Have you had any experience in appraising real estate?

A. Since 1924.

Q. State whether or not you did any appraising for your bank at Buffalo for loans?

A. I have.

Q. State whether or not you have appraised any real estate for the Department of Justice of the United States?

A. I have done considerable of that work since 1939—since August 1939 I have looked over—oh, probably on an average of fifty tracts a year.

Q. Were any of those tracts on the river bank, bordering the river?

A. Quite a few of them, resulting from the flowage in the Winfield and Gallipolis pools.

234 Q. Do you know where the Dickinson property is which is mentioned in this proceeding?

A. Yes.

Q. How long have you known this property?

A. Oh, I would say generally for about twenty years. I commenced to pay attention to it along about the time Mr. Dickinson bought it and started to build there and all. Up till that time it was just another piece of land.

Q. Do you know where the Withrow property is which is described in this proceeding?

A. Yes, sir.

Q. Have you known that property about a like period as the Dickinson property?

A. Well, I have not known it so well, because it has been off the highway.

Q. State whether or not you have made appraisals of these two tracts of land?

A. Yes, sir.

Q. About when did you make these appraisals?

A. Well, I didn't make them until lately. At the time I came here to the Department on the 11th of June 1941 the Navy Department—it was suggested at the time, I think by Mr. Dyer, that the possibility was I had better look over this property, which I did, and I have been on it a number of times since—drive in there and look at it and out; and in that matter we had the Shonk Housing property, which is just below and across Route 60 from this, in 1941, which I was very familiar with.

Q. From your experience of owning real estate and appraisals, and your acquaintance with the property in South Charleston, state whether or not you are familiar with the fair market value of property within the vicinity of the Dickinson and Withrow property?

A. I feel that I am.

Q. I wish you would state what, in your opinion, was the fair market value as of the time of the taking, which I believe it has been generally stated in the proceeding, but not definitely decided by the Court, is of September 22, 1938, for the 0.22 acres of the Dickinson property which is the acreage below normal pool, 566?

A. 0.22 I have at $257.

Q. And what, in your opinion, would be the fair market value of a one-tenth acre of the Dickinson property between contour 566 and contour 574, taking into consideration that it might be interimittently flooded more frequently than it did prior to
235 the elevation of the water in the Winfield pool, so as to constitute a taking—what price would you place on that acreage?

A. $117, making a total for 0.32 acre of $374.

Q. I wish you would explain, Mr. Brown, the method you used in arriving at these figures.

A. Well, the basis of arriving at the figures on the Dickinson tract was the fact that it had been recently purchased, and I felt—with comparative sales around in the community and all I felt that it had been purchased on about what we call a fair market value; and then naturally it comes up in your mind just what you could allocate to this part of the river bank, and it was my best judgment to allocate 25 percent of the value down there, or one-fourth.

Q. And you used that 25 percent basis as to both parcels, the 0.22 and the 0.10?

A. Yes, sir.

Q. What, in your opinion, would be the fair market value of the 0.11 acre as of the time mentioned in the former question of the Withrow property up to contour 566, being normal pool?

A. I figure that at $1,000 per acre, $110 for 0.11.

Q. What value did you put on the 0.04 acre from 566 to 574 contour?

A. The same value per acre, which equals $40, a total of $150.

Q. Then what was your total on the Dickinson property?

A. $374.

Mr. JAMES. What was the first, the 0.11 acre?

The WITNESS. $110.

Mr. JAMES. And the second, $40?

The WITNESS. $40.

Mr. DYER. You may have the witness.

Cross-examination by Mr. JAMES:

Q. Mr. Brown, how long have you been working out of the land division of the Department of justice in Charleston—the Charleston office—that is, Mr. Dyer's office, as I understand it?

A. Yes, sir. I have done some work for them in August 1939 on through the rest of 1939 and 1940 as these cases came up. I wasn't working steady, but was only working as they needed me, and through 1940 I didn't do a great deal of work, owing to the fact that I lost my home by fire and I had to build it back, and then the 11th of June 1941 the Navy Department hired me; I think I worked about a little over nine months for them.

Q. You have been working principally on the land acquisition cases?

A. It was land acquisition for the Navy Department, and I
236 did report to this office, and they guided me in my work, although I was working for the Navy Department at the time; and then I worked there till the 17th of March and I went with

the Department of Justice then about the first of April 1942 in the acquisition of the West Virginia Ordnance Works at Point Pleasant and part of this other.

Q. You say you had noticed the river bank between Charleston and Winfield for a number of years before and after the construction of the Winffeld Dam?

A. Yes, sir. It has always been a matter of interest to me, because I own some of it, and my father had somewhat created an interest in me before that by his study of them.

Q. And you have always noticed that the big slips follow closely after high water?

A. Yes, sir.

Q. And in connection with your observation of the river banks, did you ever notice that the river banks would be undermined from erosion in between high waters and would simply slough off and fall in as the high water or floods came along?

A. I have noticed a little of that right at pool stage, but it has been very negligible.

Q. Is it your opinion that in the Winfield pool there has been no more erosion of the river banks since the raising of the pool than there was before?

A. I would judge there probably has been more erosion since that than there was before.

Q. Considerably more?

A. No, sir.

Q. Very slightly more?

A. Some more. I wouldn't say just what percent or anything; it would be hard to say.

Q. Do you think the property owners along the Kanawha River between here and Winfield will agree with that opinion?

A. I don't think people ever agree.

Q. You think most of them would agree with that view?

A. It is my opinion, and it is given honestly. That is the only thing I can do.

Q. I have no doubt of that, Mr. Brown. I am just trying to ascertain whether or not you stand out by yourself in that opinion.

Mr. DYER. Your Honor, that is not a proper subject for cross-examination.

The COURT. I will sustain an objection to that.

By Mr. JAMES:

Q. I believe you said that you valued the 0.22 acre of the
237 Dickinson property which is permanently flooded on the basis of what he paid for it, allocating one-fourth of that value to the river bank. Assuming that the river bank is worth one-fourth of the top land—isn't that what you said?

A. No; I wasn't assuming it was worth one-fourth. The fact of it is when you have a piece of land you want it all to somebody else's land or to the highway or something like that, but——

Q. Well, what did you mean by——

A. I was just assuming this, that I would be willing—we don't have any sales on river bank—we know that—that would show its value; but I was just assuming that I would be willing to pay one-fourth—be willing to figure that in as a cost price of one-fourth as to owning the river bank and having control of it rather than not to.

Q. You have allocated, then, to the river bank a value of about one-fourth of the value of an equal amount of that land on the top?

A. Yes, sir.

Q. Do you know what was paid for the three and a fraction acres?

A. Yes, sir.

Q. How much would that be per acre? Wouldn't that be about $4,500 an acre?

A. If I am correct, I have it at $4,677, which would—one-fourth of that would be $1,169 per acre.

Q. And you took 22 percent of that?

A. Twenty-two percent of that.

Q. And on the same basis for the one-tenth acre?

A. Yes, sir.

Q. Mr. Brown, your farm is below the Winfield pool?

A. Yes; it is in the Gallipolis pool.

Q. How much was the pool raised at your farm?

A. Between seven and eight feet.

Q. At your farm?

A. Yes, sir. It is—it was in number 10 pool.

Q. Are you more of a farm land appraiser, Mr. Brown, than a city property appraiser?

A. I have done about equally at both.

Q. How did you value the Withrow property—on an acreage basis?

A. The Withrow property naturally the sale price was not so clear on that and all, and averaging from sales and one thing another down there I did the best I could on it. That is what I did.

238 Q. Did you find that that property down there has sold for more than $30 a front foot?

A. That property along the river bank is not the property out on the road, naturally.

Q. What value would you place on the Withrow property per front foot, the seven lots there?

A. I did not figure it on a front foot basis.

Q. Well, how much acreage did you find there?

A. I took the sales and tried to run them into acreage the best I could, and I figured that on the same ratio that I figured the other.

Q. At your basis of valuation you have got the entire Withrow property there valued at less than $1,000, that is, the seven lots with the river bank on the front of it, valued at less than $1,000?

A. Valued at the rate of $4,000 per acre.

Q. One thousand an acre, is that what you said?

A. Valued at the rate of four thousand.

Mr. JAMES. I have one. I am sorry.

The COURT. He has explained that he just took a fourth of the value because of it being down close to the river's edge.

Mr. JAMES. Oh, it is my error. I am sorry.

The WITNESS. In other words, Mr. Dickinson's property is closer in and right along the highway and $4,677 per acre, and this other is off the highway and further down the river, and I did put a value of $4,000 on it per acre.

Mr. JAMES. You get it down to about $15 a front foot for the lots?

A. Yes.

Q. And you don't attribute any particular value to the fact that it is on the river front and has a nice grove of trees there?

A. It is on the river front. I don't think the access to this property—well, I think it would materially hurt the value of it.

Q. Beg pardon?

A. I think the access to this property would somewhat hurt the value.

Q. You don't find that there is access to the property?

A. I didn't say that. I said I thought the access you had to it would hurt the value of it, simply on the standpoint that you come in the upper end and you must walk down a piece, or you come up in the lower end and come up to a dead end street, which Mr. Withrow's property is right on the dead end street.

Q. Mr. Withrow's property also is at the dead end of Kanawha Street, which gives him perfect access, doesn't it?

A. It is not an access which would appear to me to make for value at all.

239 Q. The street comes right up to his garage, doesn't it?

A. Yes, sir.

Q. Would you want any better access than that?

A. I would.

Redirect examination by Mr. DYER:

Q. I want to ask an omitted question. I want to ask you, Mr. Brown, if it is assumed that the date of taking or the date the water was impounded in the Winfield Dam was October 21, 1936, would you make any difference in your valuation between that date and September 22, 1938, in what you have already stated?

A. There was some rise in property values at that time between 1936 and 1938. I would not make any material change.

Mr. JAMES. Of course, your Honor, we want to note an objection to that question on the ground that it would be an improper basis.

The COURT. Ruling reserved.

Mr. DYER. I understand the date of the taking has not been decided by the Court.

Mr. JAMES. That's right.

By Mr. DYER:

Q. Could you tell the Court just what percent of increase would take place from 1936 to 1938 in land values, approximately?

The COURT. He has said that he would not make any appreciable change, so it seems to me——

The WITNESS. Five or ten cents—something that way.

Mr. DYER. I will withdraw that question, then.

Q. Mr. Brown, it is in evidence—I don't know whether you heard it or not—that of the 0.22 acre of the Dickinson property which was flooded by the elevation of water when the water first came up on it, there is only 0.05 acre now flooded since the fill was placed in there by Mr. Dickinson. What, in your opinion would the 0.05 acre which is now flooded of the Dickinson property, being the remainder of the 0.22 acre, be worth as of September 22, 1938?

Mr. JAMES. If your Honor please, I don't want to continually interrupt. I just want it to be clear—it is understood we are going to have an opportunity to make all our objections after the evidence is written up?

The COURT. That's right. We understand you object to this question, and the ruling is reserved.

A. The value would be as it is now, $58.50 valued per acre on 0.05 acre, as I understood it.

(Witness stands aside.)

240 (At 3:32 p. m., a recess was taken.)

AFTER RECESS—3:45 P. M.

L. R. PELZEL, called as a witness for the Government, having been duly sworn, testified as follows:

Mr. DYER. If your Honor please, I will shorten this examination as much as I can.

Direct examination by Mr. DYER:

Q. State your name, please.

A. L. R. Pelzel.

Q. Where do you live?

A. Charleston.

Q. How long have you lived here?

A. About twenty-seven years.

Q. What have you been doing?

A. Real estate business.

Q. Are you actively in the real estate business at the present time?

A. Yes, sir.

Q. From your experience in the real estate business are you acquainted with the market value of the Dickinson and Withrow properties?

A. Yes, sir, I think so.

Q. You know where those properties are?

A. Yes, sir.

Q. You have viewed them and looked over them?

A. Yes, sir. I have been out there.

Q. What, in your opinion, Mr. Pelzel, was a fair market price of the 0.22 acre of the Dickinson property which was below normal pool contour 566, as of September 22, 1938?

A. $250.

Q. And how much for the 0.10 acre from 566 up to 574, taking into consideration the intermittent floods?

A. $65.

Q. Making what total?

A. $315.

Q. What in your opinion was the fair market value of the 0.11 acre of the Withrow property as of September 22, 1938?

A. $125.

Q. And for the 0.04 acre from 566 to 574 contour?

A. $25.

Q. Would there be any difference in that valuation if you would take the date October 21, 1936, instead of September 22, 1938—would you make any difference in the valuation?

A. No particular difference, I don't believe.

241 Q. Mr. Pelzel, there has been some testimony in the case that of the 0.22 acre of the Dickinson property there is only 0.05 of that part now under water. State in your opinion what would be the fair market value of the 0.05?

Mr. JAMES. May the record show the same objection, your Honor?

The COURT. Yes.

A. $55.

Cross-examination by Mr. JAMES:

Q. Mr. Pelzel how did you arrive at a value of $250 for the 0.22 acre of the Dickinson river bank?

A. I valued that at $1,100 an acre.

Q. That is the top land or the—

A. No, sir, the area below 566.

Q. At $1,100 an acre?

A. Yes, sir.

Q. How do you arrive at that?

A. That would make a little less than $250. I made it $250 even.

Q. I say, how would you arrive at a value of $1,100 an acre for the 0.22?

A. That is just my opinion of what that sort of land would be worth.

Q. You know what the entire tract cost per acre?

A. Yes, sir.

Q. In August 1937?

A. Yes, sir.

Q. Do you know for what purpose the land was purchased and what it has been used for?

A. Yes, sir.

Q. For that kind of purpose, land has a value because of its abutting upon a river, does it not?

A. Yes, sir.

Q. I mean, for residential purposes it is desirable to have a nice site on the river bank?

A. That's right.

Q. And if that river bank is well wooded with shade trees and small shrubbery, that adds considerably to its value as a river bank, doesn't it?

A. That adds to the value; yes, sir.

Q. In view of the fact that it was being used and bought for that purpose, and that site was desirable because of its location on the river bank, don't you think it has a greater value than, say, one-fifth of the value of the top land?

A. No; this happens to be a little less than a fourth—

242 between a fourth and a fifth—in view of the fact that according to the Government records this particular tract below 566 has been under water 288 times in 50 years previous to its purchase——

Q. You are talking about the 0.22 acre——

A. And it has been under water an average of 16 days out of each year for 50 years; I think that is a fair value for it.

Q. Is that correct?

A. That is the records I have from the engineer's office.

Q. Did you see that property before the water was raised?

A. No; not particularly, that is——

Q. You don't know the character of the river bank or the vegetation on the river bank?

A. No, sir. I am just assuming, the same as the other boys, that it is typical river bank.

Q. Well, if it were true that the flooding occasionally that you have referred to did not cause any erosion or disturb the vegetation there, would that change your opinion as to its value?

A. I don't think so.

Q. Mr. Pelzel, in selling river bank property—and I assume you have dealt in river bank property at times—do you ordinarily place one value on the river bank and another value on the top land, or do you sell it all together?

A. Well, you sell it all together.

Q. Any allocation, then, that you make is, by its very nature, arbitrary to a certain extent?

A. Oh, yes.

Judge GIVEN. Your Honor, it seems to me that that is argument, and not cross-examination.

The COURT. I overrule the objection.

(Witness stands aside.)

C. W. DEWITT called as a witness for the Government, having been duly sworn, testified as follows:

Direct examination by Mr. DYER:

Q. State your name, please.

A. C. W. DeWitt.

Q. Where do you live, Mr. DeWitt?

A. St. Albans.

Q. How long have you lived there?

A. Eight years.

Q. What do you do?

A. Real estate business.

Q. Are you in the real estate business at the present time?

A. Yes, sir.

Q. Do you own real estate?

A. Yes, sir.

243 Q. Do you own any real estate near the Withrow property?

A. I own lots in the Parkland Addition, 175, 176, 177.

Q. I will ask you this, do you know where the Dickinson property is?

A. Yes.

Q. Do you know where the Withrow property is?

A. Yes, sir.

Q. With your experience in the real estate business, Mr. DeWitt, state whether or not you are familiar with the market value of property within the vicinity of these properties?

A. In my opinion I am.

Q. State whether or not you have made an appraisal of these properties at the request of the Government?

A. I have.

Q. When did you make your appraisals—about when?

A. On or about the 12th day of May.

Q. What, in your opinion, is the fair market value of the 0.22 acres of the Dickinson property which is below 566, normal pool stage?

A. $308.

Q. And how much for the 0.10 acre from 566 up to contour 574?

A. $70.

Q. Making a total of how much?

A. $378.

Q. How do you arrive at these figures, Mr. DeWitt?

A. I arrive at them by taking the basis of $1,400 an acre. It is rather difficult to arrive at any figure on a narrow strip of land on any property, but that is the valuation that I gave it in that particular location.

Q. It has been in evidence, Mr. DeWitt, that there is 0.05 acre of the Dickinson 0.22 acre which is under water now and the rest of it is above water by reason of the improvements put in. What, in your opinion, would be the fair market value of the 0.05 acre which is under water as of September 22, 1938?

Mr. JAMES. The same objection there, your Honor.

The COURT. All right.

Mr. DYER. I don't know whether you heard the testimony on it or not, but of the 0.22 acre of the Dickinson property, by fills being made down there as shown by evidence in the case, all of it except 0.05 has been reclaimed, and 0.05 is under the water yet—the rest of it is outside by reason of the fill above the water. What value would you put on the 0.05 of the 0.22 acres?

A. I would place it on the same basis.

244 Q. Will you make that calculation and state what that amounts to?

(No answer.)

Q. You would make it on the same basis you made before?

A. Yes, sir.

Mr. JAMES. That is five one-hundredths of an acre, not five one-hundredths of the 0.22 acre, is it?

Mr. DYER. Well, it is still a part of the 0.22 acre.

The COURT. His valuation would come to $70 at $1,400 an acre.

Mr. DYER. What is the market value you placed on the 0.11 acre which is below normal pool?

A. On the eleven?

Q. That's right.

A. $110.

Q. And how much on the 0.04 acre between 566 and 574?

A. That would be less than 200 square feet; $1.

Q. Making a total of $111 all together?

A. That's right.

Q. Would you make any particular change in the appraisal if you were appraising it as of October 21, 1936, instead of September 22, 1938—would you make any material change in the amount?

A. I think not.

Cross-examination by Mr. JAMES:

Q. What is the rate per acre that you value the 0.11 acre Withrow tract?

A. On the basis of $1,100 an acre.

Q. I believe you say you own three of these lots in Parkland Addition?

A. Yes, sir.

Q. Do yours front on the river?

A. No, sir.

Q. Where are your lots located?

A. They face—lie on the east side of Park Avenue.

Q. What would you say the Withrow lots are worth a front foot?

A. Why, that would depend upon the depth of them. Which lots are you talking about? He has various lots.

Q. He has seven that are involved in this suit, and I am talking about the lots that are involved in this suit and which you have been testifying about.

A. Well, the depth of them, it is hard to appraise them as lots.

Q. Some of the witnesses have testified that his lots average about 180 feet deep. You should be fairly familiar with those Parkland Addition lots. You said you were familiar with Withrow's property.

A. That's right.

Q. You recall the growth of trees on the river front there?

A. Not many trees on his property.

Q. You say there are not many?

A. The upper end.

Q. You say there are not many trees?

A. No; about twelve or fourteen, I would say.

Q. Including the river bank?

A. Yes. On the river bank? You are talking about on the river bank?

Q. Yes; do you say only twelve or thirteen?

A. I didn't count them. I would say something like that.

Q. You must not be very familiar with the property.

A. I was up there just last month.

Q. Well, to continue with my question, what value did you put on those lots per front foot?

A. Around $30 a front foot for the entire lot.

Q. That would give you about what rate per acre of the Withrow property—what price per acre?

A. Well, that would depend upon cutting your lots. You take a lot—an acre, you have to takeout a certain amount for streets and so forth—you would cut about five lots to an acre.

Q. No, the streets are already laid *out there and he* has got seven lots which average about 180 feet deep and have a frontage of 180 feet. Now, you value that at about $30 a front foot?

A. That's right.

Q. On an acreage basis, 180 by 180, about what price per acre does it give you?

A. I will have to figure out the square footage to see what part it would be of an acre.

Q. Before you do that answer this question. If you value it at $2,000 an acre, about what value would you put on the river bank, that is, the 0.11 acre—how much difference in value between the top land and the——

A. Well, the trouble of it is, the piece that you are trying to value is a strip so wide and running along the lots, which does not necessarily interfere particularly with your lots. You have still got your length on the lots. That is why it is difficult to appraise.

Q. Is it true that the river bank and the lots are now being used and enjoyed for the same purpose, namely, residential purposes?

A. That's right.

246 Q. Now go back to my other question. What value do you get per acre there on the basis of $30 per front foot?

A. That would depend entirely on the depth of your lots.

Mr. DYER. If your Honor please, I think this is hardly proper cross-examination. I have this in mind, although I may be wrong about it, that you value lots as lots and you value acreage as acreage. To go back and say how many acres are in your lots and arrive at the value of your lots is an improper method of arriving at their value in putting on the proof. In other words, you are not permitted to take an acre, especially in condemnation cases—I think we will agree on this—and figure how many lots it will make and value it on the basis of that number of lots.

The COURT. I will overrule your objection.

By Mr. JAMES:

Q. Have you made your computation?

(No answer.)

Q. To assist you, doesn't it amount to about $5,400 an acre?

A. It possibly would on the level ground.

Q. Yes.

A. We are not talking about, as I understand it, level ground.

Q. I understand that. Now, for purposes of comparison and arriving at the value of the river bank, if the top land there is worth $5,400 an acre and this river bank is desirable and is used and enjoyed as a part of that property for residential purposes, what would you say the river bank is worth per acre?

A. As I stated before, in that particular acre, owing to the way it was situated and what it means to the rest of the property, I value it the same as it was before, because you have your lots there and you have so many feet to take off of the back of it. It doesn't lie in a group where you could cut into a lot the part in question; it is a row along the back of the lots.

Q. You are giving me a lot of reasons without answering my question. Can you answer the question?

A. You ask me the question again, please.

Q. What value per acre do you put on the river bank?

A. Well, that would depend on how your parcel of land was situated on the bank. If it was four feet wide or eight feet wide or ten foot wide or whether it is deep enough for a lot.

Q. Mr. DeWitt, I am talking about this 0.11 acre which you have been testifying about.

A. Yes, sir.

Q. What value do you put on that per acre?

A. I put $1,000 on it.

(Witness stands aside.)

247 Mr. DYER. If your Honor please, I want to state that Mr. G. D. Tuggle, who is a Government appraiser and has been here as one of our chief witnesses on value in this case, was unfortunately called to Washington last night on account of the serious illness of his sister. She had to have an emergency operation and they would not operate until she got there, or some member of the family; and before he left he gave me the figures of that value that he would testify if he was here, and I was just wondering if counsel for the opposite side would stipulate that if he were here he would place a certain value on the Dickinson property and also the Withrow property, rather than to ask for delay or continuing the case until he comes back before closing. I don't know just what

day he will come back; it will depend on the condition of his sister and how serious it is.

Mr. JAMES. Of course, I would like to know what his figures are before I would have any notion whether I would want to stipulate.

Mr. DYER. I submitted the figures before I made this motion.

Mr. JAMES. You have not showed me any figures.

Mr. DYER. Oh, yes; I showed them to you and you stated they were too low.

Mr. JAMES. That's right. I have seen these figures, yes, sir. Your Honor will understand that it amounts to a man testifying without our having an opportunity to cross-examine him, and with the Court's thorough understanding that it is going in without our having a chance to cross-examine and weighing it in the light of that circumstance, I am willing to stipulate it.

The COURT. All right. I presume it is simply cumulative and amounts to about the same average that the other witnesses testified to, and I would also presume that if this witness were cross-examined his answers would be approximately the same as the answers of the other witnesses on cross-examination.

Mr. DYER. In fact, I think it is lower than the other witnesses.

Mr. JAMES. His figures are considerably lower than these other witnesses, and if that is evaluated in the light of the fact that we have not had a chance to cross-examine, we would be willing to stipulate that he would testify it.

The COURT. All right.

Stipulation

Mr. JAMES. The plaintiffs Dickinson and Withrow stipulate and agree that G. D. Tuggle, a competent witness, if present, would testify in this case that the 0.22 acre of the Dickinson lands
248 permanently flooded would have a market value as of September 22, 1938, of $107, and that the 0.10 acre of the Dickinson lands flooded intermittently would have a value of $48 as of September 22, 1938, making a total of $155 in the case of W. M. Dickinson; and that the 0.11 acre of the Withrow property permanently flooded will have a market value as of September 22, 1938, of $54, and the 0.04 acre of the Withrow property intermittently flooded would have a market value of $36 as of September 22, 1938, making a total of $90 for the Withrow property.

Counsel for the plaintiffs agree to this stipulation with the understanding that such appraisements or valuations are to be considered by the Court in the light of the fact that the plaintiffs are not able to exercise their normal right of cross-examining such witness.

The COURT. I think it ought to be added to that stipulation what Mr. Tuggle is—what his occupation is.

Mr. D[illegible]. He is a Government appraiser.

Mr. JAMES. We put in the phrase, "a competent witness," thinking that would be a catch-all to recognize his competency.

Mr. DYER. If your Honor please as to the Dickinson property the word used was "permanently flooded." That was used in the light of the improvements. I suppose the Court will understand we are not waiving our right as to the 0.05 acre, but only describing the conditions at the time the final elevation was made.

The COURT. All right.

The Government here rested its case.

The Plaintiffs here rested their case.

The COURT. Do you wish to file any further briefs? I have the briefs you filed before the trial, which I have not yet read, but which I will read and consider.

Mr. JAMES. As I understand it, after the evidence is written up counsel will have an opportunity to frame their motions, assigning their reasons for the motions.

The COURT. That's right, and those motions will then be made a part of the transcript of the record.

Mr. JAMES. I think it is quite possible that after the testimony is written up and our motions and reasons for the motions have been assigned, the plaintiffs would probably like to add a little supplement to the brief which I have already handed your Honor.

Mr. BOYD. I believe that would be true of the Government too, your Honor. I feel it would be desirable for us to draft our motions to strike evidence, and with that at the same time
249 submit proposed findings of fact to your Honor, with supporting briefs for both the motions and the findings.

The COURT. I would be glad to have proposed findings of fact submitted by both sides in connection with the brief, and conclusions of law also—both findings of fact and conclusions of law submitted to me along with your briefs, so that I will get the entire picture of the position of both sides.

Mr. JAMES. I hope the Court will not place a dead line just as yet on that. In my case, and I know in the case of Mr. Dyer, we are going to spend some time after just a little bit on this Bluestone case.

The COURT. Well, I am in no great hurry, due to engagements of the Court at Bluefield, Beckley and so on this summer, so I will be liberal about that. If it is necessary later on to fix a dead line we will do it, but at present we will just ask the parties to act as promptly as possible.

If there is nothing further in connection with the case, we will now adjourn.

(Whereupon, the hearing was closed.)

PROCEEDINGS IN THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 5419

UNITED STATES OF AMERICA, APPELLANT

v.

WILLIAM M. DICKINSON, APPELLEE

Appeal from the District Court of the United States for the Southern District of West Virginia, at Charleston

August 9, 1945, the transcript of record is filed and the cause docketed.

Same day, order extending time to file record and docket appeals is filed.

Same day, the original exhibits are certified up.

August 11, 1945, the appearance of Ernest K. James is entered for the appellee.

August 21, 1945, the appearance of Leslie E. Given, U. S. attorney; J. Edward Williams, Acting Head, Lands Division, Department of Justice, and Roger P. Marquis, Attorney, Department of Justice, is entered for the appellant.

August 28, 1945, stipulation to continue cases to the November term, 1945, and as to briefs is filed.

Order continuing cases

Filed August 30, 1945

[Style of Court and titles omitted.]

Upon the stipulation of the parties hereto, and for good cause shown,

It is ordered that the above entitled cases be continued from the October Term to the November Term of this Court.

It is further ordered that the brief and appendix for the Appellant be filed 30 days before the beginning of the November term, and that the brief and appendix for the Appellees be filed 5 days before the November term.

JOHN J. PARKER,
Senior Circuit Judge.

AUGUST 29, 1945.

October 6, 1945, appendix to brief of appellant is filed.

October 19, 1945, brief on behalf of appellant is filed.

October 31, 1945, brief on behalf of appellee is filed.

Argument of cause

November 6, 1945 (November term, 1945), cause came on to be heard, together with No. 5420, before Soper, Circuit Judge, and Coleman and Barksdale, District Judges, and was argued by counsel and submitted.

Opinion

Filed January 4, 1946

Clerk's Office, U. S. Circuit Court of Appeals, Fourth Circuit, Claude M. Dean, Clerk, Richmond.

United States Circuit Court of Appeals, Fourth Circuit

No. 5419

UNITED STATES OF AMERICA, APPELLANT

v.

WILLIAM M. DICKINSON, APPELLEE

No. 5420

UNITED STATES OF AMERICA, APPELLANT

v.

F. H. WITHROW, APPELLEE

Appeals from the District Court of the United States for the Southern District of West Virginia, at Charleston

(Argued November 6, 1945—Decided January 4, 1946)

Before SOPER, Circuit Judge, and COLEMAN and BARKSDALE, District Judges

Roger P. Marquis, Attorney, Department of Justice (J. Edward Williams, Acting Head, Lands Division, Department of Justice, and Leslie E. Given, U. S. Attorney, on brief) for Appellant, and Ernest K. James for Appellees.

SOPER, Circuit Judge:

These appeals were taken by the United States from judgments against it in two suits brought by landowners under the Tucker Act, 28 U. S. C. A. § 41 (20), to recover compensation for the taking of their lands and for the erosion and intermittent flooding thereof caused by raising the water level of the Kanawha River in South Charleston, West Virginia, by the erection and operation of the Winfield Lock and Dam.

Dickinson's land consisted of a tract 3.1 acres in extent which bounded on the low-water mark of the river for a distance of 411 feet. Dickinson acquired the land on August 16, 1937, and between that date and September 22, 1938, which the court found to be the date of the taking, he made substantial improvements thereon in the form of grading and filling, construction of sewers, water and gas lines, the installation of a gasoline filling station and the erection of a large residence near the top of the river bank. By reason of raising the level of the river and the operation of the dam 0.22 acre of land was permanently submerged and 0.10 acre thereof lying between the elevation of 566 feet and 574 feet above mean sea level will be subject to intermittent flooding. The court found that on September 22, 1938 the 0.22 acre permanently flooded had a fair market value of $400 and the flowage easement to flood intermittently the 0.10 acre a fair market value of $75.

The court also found that during the latter raises in the stage of the river, and after the attainment of the present permanent level of 566 feet, considerable erosion of the residue of the plaintiff's property at the river bank occurred which was caused by the saturation and softening of the soil and the wave action thereon that resulted from the permanent flooding of the 0.22 acre of the plaintiff's land. For the damages caused by this erosion the District Judge allowed the property owner the sum of $4,245.63 on the theory that for this sum appropriate protective work along the river bank to prevent the erosion, consisting of a rock toe wall and stone riprapping up to an elevation of 569 feet, could have been installed.

Withrow's property is a tract of land, containing a number of city lots, and fronting on the river approximately 180 feet. The District Court found that 0.11 acre thereof was permanently submerged and 0.04 acre will be subject to intermittent flooding as the result of the raising of the level of the river and the operation of the dam. The court found that the land was taken on September 22, 1938, and that then the fair market value of the land permanently submerged was $200 and the fair market value of the flowage easement to flood intermittently the 0.04 acre was $35.

The court also found that, during the latter stages in the rise of the river and after the attainment of the permanent pool stage of 566 feet above mean sea level, considerable erosion to the residue of the property at the river bank was caused by the saturation and softening of the soil and the wave action thereon which was the direct and proximate result of the taking of the 0.11 acre permanently flooded. For the damages caused by the erosion the court allowed the sum of $1,859.40 on the theory that for this sum of money the owner could have erected a rock toe

wall and stone riprapping to an elevation of 569 feet above sea level which would have protected the property from erosion.

The first important contention raised by the United States is that both suits were barred by limitations under the Tucker Act because they were not instituted until the month of April 1943, the complaint of Dickinson on April 1, and the complaint of Withrow on April 10, more than six years after the rights of action accrued. The decision of this question depends upon the date upon which the taking of the plaintiffs' properties occurred and for this purpose it is necessary to consider the several steps which took place leading to the construction and completion of the dam and the raising of the river from time to time as the pool was filled. The improvement of the river to support a 9 foot channel by substituting four new locks and dams for those previously in place was authorized by the Acts of July 3, 1930, 46 Stat. 918, 928, and August 30, 1935, 49 Stat. 1028, 1035. The Winfield Lock and Dam was constructed under the authority of these Acts, and on July 1, 1936, notice was given to the holders of War Department permits in the area that the water elevation would be raised, and shrubbery and vegetation along the river banks were cut by the government. By October 21, 1936, construction of the dam had proceeded far enough to raise the elevation in the pool of a previous dam downstream from the plaintiffs' properties which, however, were not affected thereby. Subsequently the river was raised by the operation of the Winfield Dam at the plaintiffs' properties by gradual stages from a previous elevation of 554.65 to the present elevation of 566 feet above mean sea level, namely, on May 30, 1937, to 556 feet; on October 20, 1937, to 558 feet; on January 6, 1938, to 563.15 feet; on August 26, 1938, to 565 feet; on September 1, 1938, to 565.5 feet and on September 22, 1938, to 566 feet. The dam was officially inspected and accepted by the federal government on August 20, 1937.

The District Judge held that the cause of action in each case accrued on September 22, 1938 when the pool was filled and the river was finally raised to the contemplated new level of 566 feet, an increase of 11.35 feet over the former normal level, whereby the lands of the plaintiffs were permanently submerged as above described. Under this holding the suits of the plaintiffs instituted in April, 1943 were not barred by limitations. The United States, however, contends that the taking occurred and the right of action accrued on October 21, 1936, before the lands of the plaintiffs were actually invaded, but when the construction of the dam had proceeded far enough to raise the level of the pool downstream below the lands of the plaintiffs. Alternatively the gov-

ernment suggests that the taking occurred on May 30, 1937 when the level of the river opposite the plaintiffs' lands was first raised by the operation of the dam from 554.65 to 566 feet and plaintiffs' lands were first partially submerged. It will be observed that if the earlier date is accepted as correct, the pending suits were barred; but if the later date is accepted, the pending suits were brought in due time. In either event it is important to fix the precise date because it is said that the cases at bar were selected as tests to determine the legal principles to be applied in similar suits now pending in the District Court.

It is conceded by both parties that although the use of the lands by the United States was continuous, only one cause of action accrued; and this position is sustained by the decisions which hold that when a permanent structure erected by government authority results in the invasion of or damage to land, only one right of action arises and this accrues upon the completion of the structure and the happening of the injury, and in this action, all damages, past, present and prospective are recoverable. Suehr v. Chicago Sanitary District, 242 Ill. 496; Carpenter v. Lancaster, 212 Pa. St. 581; King v. Board of Council, City of Danville, 128 Ky. 321; 4 Sutherland on Damages, 4 Ed., § 1039; 1 Am. Jur., Actions, § 117.

The contention of the United States that the pending suits are barred by limitations rests primarily upon the decisions of the Court of Claims in County of Marion, W. Va. v. United States, 53 Ct. Cls. 120, and Columbia Haley Dooner, et al. v. United States, 95 Ct. Cls. 392. In the first of these cases it was suggested that it might be said that the statute of limitations begins to run in cases of this kind when the dam is completed and put in operation, or when the first damage is suffered, or at some subsequent time when the taking is to be deemed complete. The case before the court concerned certain county roads which were occasionally invaded by intermittent floods alleged to be caused by the erection of a government dam which was completed and began to fill on November 3, 1903. The suit was not brought until November 5, 1911. The landowner claimed that the taking did not occur until 1911, contending that the statute did not begin to run until the cause of action was complete and the roads had been abandoned. But the evidence showed that all the roads were subject to intermittent flooding as soon as the pool filled and the court therefore rejected the landowner's contention and, without stating that the right of action accrued when the dam was finished or when the water first began to submerge the land, held that so far as there was any taking, it was complete when the water had reached pool level. The point was emphasized that the time of

accrual of the right of action did not depend on the time when the county decided to abandon the use of the roads. Again, in the second cited case from the Court of Claims, Columbia Haley Dooner, et al. v. United States, 95 Ct. Cls. 392, 397, 399, it was held that the owner of permanently flooded lands was entitled to interest from the date when the land was completely submerged.

We think that this is the rule to be applied in the cases now under consideration. The taking occurred in the course of the exercise by the United States of its right to improve the navigation of the river, but without prior condemnation or purchase of the land which it intended to invade. These circumstances gave rise to an implied contract to pay for the land taken, but the subject matter of the contract and the extent of the land to be taken were not established with certainty until the pool was raised to its permanent level. Until this occurred the whole matter was subject to government change and control and the taking was not complete. It is established that the mere fact that the government has undertaken a flood control project and completed a part thereof without the invasion of the land of abutting owners does not amount to a taking thereof. United States v. Sponenbarger, 308 U. S. 256, 265; Danforth v. United States, 308 U. S. 271, 286. An intention ultimately to use the land is not sufficient to constitute a taking under these circumstances.[1]

When we come to the merits of the case we find no denial of liability on the part of the United States for the value of the land permanently submerged or for the damage, if any, to the land from permanent intermittent floods caused by the operation of the dam. Both invasions, if found to exist, are conceded to be takings for which compensation must be paid by the government under the rules established by the decisions,[2] and the values placed by the District Judge upon the land are not attacked.

The decision of the District Judge is attacked principally because he allowed substantial compensation—$4,245.63 in the case of Dickinson and $1,859.40 in the case of Withrow—for the erosion and damage caused by the raising of the pool to the residue of the property not permanently submerged. The United States contends that the losses suffered by the landowners in this respect were not the result of a taking of the property in the constitutional sense, but were merely consequential damages attendant upon a public undertaking for which no recovery can be allowed by

[1] The intention of the United States to use the land of a private owner as a suitable field over which to fire heavy guns installed for the purpose may constitute a taking; Peabody v. United States, 231 U. S. 530; Portsmouth Co. v. United States, 260 U. S. 1; but it is obvious that in such a situation, the existence of the intention itself deprives the owner of the use of his land and constitutes a taking.

[2] Pumpelly v. Green Bay Co., 13 Wall. 166; United States v. Lynah, 188 U. S. 445; United States v. Cress, 243 U. S. 316; Jacobs v. United States, 290 U. S. 13; United States v. Sponenbarger, 308 U. S. 256, 267; United States v. Willis, 4 Cir., 141 F. 2d 314, 316.

the courts. Many cases are cited [3] in which the courts have been called upon to consider damages to land from flooding or erosion caused by the erection of dams, dykes and other structures under governmental authority; and it has been necessary to draw the difficult line between the taking involved in the direct appropriation of private land for public use for which the United States is liable at the suit of the landowner, and the indirect consequential damages flowing from the construction of public structures which are recoverable only by act of Congress. These cases illustrate a variety of circumstances in which heavy damages from flooding or erosion took place and it was held that the United States was not liable for the loss sustained or for the cost of protective measures to prevent it.

But these decisions do not touch the specific point upon which the landowners here rely, for in none of them was there a permanent submersion and an acknowledged taking of any part of the land such as has occurred in the cases now before the court. The landowners rest their case in this respect on another line of authority which holds that when part of an owner's and is completely taken, he is entitled not only to compensation therefor but also to compensation for any damage occasioned to his remaining land. It was on this theory that the court below based its findings in the sums above stated for the cost of protecting the residue of the lands against erosion and flood damage. The court found as to the Dickinson property that between 5,000 and 7,000 cubic yards of the river bank broke off and slipped into the river, approximately thirty trees, ranging in diameter from six inches to one foot six inches, slipped into the river or were destroyed, and a large crack developed in the earth above the top of the river bank and extended through the foundation of Dickinson's residence causing substantial damage. This erosion and damage the court found to be due to the saturation and flooding of the soil and wave action as the direct and proximate result of the permanent flooding of the above described 0.22 acre of Dickinson's land.

With respect to Withrow's land the court made the similar finding that considerable erosion of the river bank abutting the property occurred, a substantial part of the bank broke off and slipped into the river, approximately twenty trees ranging in

[3] Gibson v. United States, 166 U. S. 269; Bedford v. United States, 192 U. S. 217; Manigault v. Springs, 199 U. S. 473; Jackson v. United States, 230 U. S. 1; Hughes v. United States, 230 U. S. 24; Cubbins v. Mississippi River Com'n., 241 U. S. 351; Horstman Co. v. United States, 257 U. S. 138; Sanguinetti v. United States, 264 U. S. 146; United States v. Chicago, M. St. P. & P. R. Co., 312 U. S. 592; United States v. Willow River Power Co., 324 U. S. 499; Sallotte v. King Bridge Co., 6 Cir., 122 F. 378; Franklin v. United States, 6 Cir., 101 F. 2d 459; W. A. Ross Const. Co. v. Yearsley, 8 Cir., 103 F. 2d 589; Cf. Coleman v. United States, N. D. Ala., S. D., 181 F. 599.

diameter from six to twenty-four inches slipped into the river or were destroyed, and the unpaved portion of the river road near its dead end in front of Withrow's residence subsided from four to eight inches. This erosion and damage was due to the same causes as in the case of Dickinson and was the result of the taking of the aforesaid described 0.11 acre of Withrow's land which was permanently flooded. The court also found that in view of the character and value of the properties as of September 28, 1938, when the pool was filled, it would have been sound economy for Dickinson to have spent the sum of $4,245.63 and for Withrow the sum of $1,859.40 to protect the residue of their respective properties against erosion and damages.

There is abundant authority to support this point of view, for example, United States v. Grizzard, 219 U. S. 180, where a part of a farm was taken for the purpose of improving the navigation of a stream by the erection of government locks and dams, and in addition an easement of access from the land to a public road was destroyed. The court held that the government was liable for the damage to the residue, saying (pp. 183, 184–5):

"* * * Whenever there has been an actual physical taking of a part of a distinct tract of land, the compensation to be awarded includes not only the market value of that part of the tract appropriated, but the damage to the remainder resulting from that taking, embracing, of course, injury due to the use to which the part appropriated is to be devoted.

"The constitutional limitation upon the power of eminent domain possessed by the United States is that 'private property shall not be taken for public use without just compensation.' The 'just compensation' thus guaranteed obviously requires that the recompense to the owner for the loss caused to him by the taking of a part of a parcel, or single tract of land shall be measured by the loss resulting to him from the appropriation. If, as the court below found, the flooding and taking of a part of the plaintiffs' farm has depreciated the usefulness and value of the remainder the owner is not justly compensated by paying for only that actually appropriated, and leaving him uncompensated for the depreciation over benefits to that which remains. In recognition of this principle of justice it is required that regard be had to the effect of the appropriation of a part of a single parcel upon the remaining interest of the owner, by taking into account both the benefits which accrue and the depreciation which results to the remainder in its use and value. Thus in Bauman v. Ross, 167 U. S. 548, 574, it is said: 'Consequently, when part only of a parcel of land is taken for a highway, the value of that part is not the sole measure of compensation or damages to be paid to the owner; but the incidental injury or

benefit to the part not taken is also to be considered. When the part not taken is left in such shape or condition as to be in itself of less value than before, the owner is entitled to additional damages on that account. When, on the other hand, the part which he retains is specially and directly increased in value by the public improvement, the damages to the whole parcel by the appropriation of part of it are lessened.'"

See also, United States v. Weich, 217 U. S. 333; Campbell v. United States, 266 U. S. 368; United States v. General Motors Corp., 323 U. S. 373; Lewis on Eminent Domain, 3d Ed., §§ 686 and 710.

A more recent application of the rule is found in cases in which losses to the property of the Chicago B & Q. Railroad Company were occasioned by improvements in the navigation of the Mississippi River. In United States v. Chicago, B. & Q. R. Co., 8 Cir., 82 F. 131, certiorari denied 298 U. S. 689, it was shown that the level of the river was raised by a government dam to such a height as to flood twenty-four acres of the railroad's property and to cover the right of way and railroad embankment to a point 3.45 feet below the top of the railroad ties. Hence, it became necessary to raise and widen the embankment and to raise the tracks so as to create a freeboard of seven feet above the new level of the pool and also to raise culverts and bridges and riprapp the embankment with rock. This work was necessary in order that the railroad might have as good and safe a track as it had before the improvement and to secure protection against the effect of saturation, wave action and distortion by ice. The suit was brought by the United States for condemnation of the floodway easement over the right of way and railroad embankment, and it was held that the railroad was entitled to recover not only the value of the twenty-four acres permanently submerged, which was comparatively small, but also the cost for the changes in the embankment and the railroad line which were needed to protect the railroad and enable it to continue in operation. A verdict in favor of the railroad for $240,000 was sustained. This decision was followed by United States v. Chicago, B. & Q. R. Co., 7 Cir., 90 F. 2d 161, in which the railroad was allowed the sum of $400 for 1.6 acre submerged and the additional sum of $347,411.65 as just compensation for the damage to the remainder of the railroad's property caused by the construction and operation of the dam.

We think that this rule is applicable here and that in each case the landowner should be compensated for the loss to the residue of his property occasioned by the building of the dam. The District Judge, as we have seen, based the amount of the recovery in each case upon the reasonable cost, as of September 22, 1938,

of protective work adequate to prevent the damage by erosion if installed prior to the raising of the level of the river. He found that the cost of such work in the Dickinson case would have been $4,245.63 and in the Withrow case $1,859.40 and that in each instance it would have been sound economy, in view of the character and nature of the property, to have made the expenditure.

The United States argues that there was no showing as to whether or not these sums exceeded the damages from erosion and therefore should not have been allowed because the government is not liable for any sum greater than the market value of the property that might otherwise be destroyed. The testimony, however, shows that Dickinson's property was worth $45,000 and Withrow's property $15,000 in September, 1938 and qualified witnesses testified that in view of the character and value of the property, the expenditure of larger sums than those allowed by the court to prevent erosion and damages would have been economically justified. This evidence can only mean that the erosion unchecked would destroy property values equal to or in excess of the cost of preventive structures. The issue involved is one of fact, and there was evidence to support the finding of the judge. There was abundant evidence given at the hearing to show that erosion had resulted and would result from the operation of the dam; and it was the function of the trial court to determine the amount of the resultant damage. We find no reason to upset its findings in these respects.

The United States also contends that Dickinson is not entitled to compensation for the permanent flooding of the entire 0.22 acre submerged, because in the year 1940, with the permission of the Secretary of War, he reclaimed the greater part thereof. This was done at a cost of $16,000 by the installation of protective work consisting of earth and rock fill to prevent further erosion and damage. The fill exceeded the amount of the river bank that had been washed into the river, with the result that all but 0.05 acre of the land originally submerged was reclaimed. It is therefore contended that Dickinson is entitled to be compensated only for the 0.05 acre, and the decision in Kelley's Creek & N. W. R. Co. v. United States, 100 Ct. Cls. 396, 412, is cited in support of the contention. We disagree with the holding in that case insofar as it may be thought to lead to the conclusion that Dickinson was not entitled to be paid for the value of the entire acreage completely taken on September 26, 1938. At that time the land was taken under an implied contract on the part of the United States to pay for it. It is clear that the government was not relieved from this obligation by the mere fact that the landowner, with its approval, subsequently recovered a part of the acreage at his own expense.

Finally, the government contends that there was no evidence to support the finding that the government took an easement to flood the land intermittently or to support the value placed upon the easement by the court. In neither aspect can the contention be sustained. The easement relates to the land between the permanent elevation of the pool at 566 feet and elevation 574 feet above sea level covering 0.10 acre of Dickinson's land for which $75 was allowed and 0.04 acre of Withrow's land, for which $35 was allowed. Qualified witnesses estimated the diminution of value that would occur upon the assumption that the acreage would be flooded from time to time and these estimates were in excess of the allowances made by the court. There was in addition evidence to support the finding that the acreage would be subject to intermittent flooding by the operation of the dam. It was shown that the government had acquired by condemnation flowage easements extending to the elevation of 574 feet on non-navigable streams contributory to the Winfield Pool in the vicinity of the Dickinson and Withrow properties and that within the eight foot area between the elevations of 566 and 574 feet the stage of the river can be made to rise and fall through the manipulation of the dam. The frequency within which the flooding will occur was not shown, but we think that the acquisition of flowage easements in the vicinity and the construction of the dam with equipment capable of flooding the lands to the elevation of 574 feet indicate an intent to subject the land to intermittent flooding and amount to the taking of easements for which compensation was due. See Peabody v. United States, 231 U. S. 530.

The judgments of the District Court will be affirmed.

Judgment

Filed and Entered January 4, 1946

United States Circuit Court of Appeals, Fourth Circuit

No. 5419

UNITED STATES OF AMERICA, APPELLANT

vs.

WILLIAM M. DICKINSON, APPELLEE

Appeal from the District Court of the United States for the Southern District of West Virginia

This cause came on to be heard on the transcript of the record from the District Court of the United States for the Southern District of West Virginia, and was argued by counsel.

On consideration whereof, it is now here ordered and adjudged by this Court that the judgment of the said District Court appealed from, in this cause, be, and the same is hereby, affirmed.

MORRIS A. SOPER,
U. S. Circuit Judge.
WILLIAM C. COLEMAN,
U. S. District Judge.
A. D. BARKSDALE,
U. S. District Judge.

On another day, to wit, February 4, 1945, the mandate of this Court, in this cause, is issued and transmitted to the District Court of the United States for the Southern District of West Virginia, at Charleston, in due form.

Same day, the original exhibits are returned to the Clerk of the District Court at Charleston, West Virginia.

Stipulation

Supreme Court of the United States

October Term, 1945

No. —

UNITED STATES OF AMERICA, PETITIONER

v.

WILLIAM M. DICKINSON

and

UNITED STATES OF AMERICA, PETITIONER

v.

F. H. WITHROW

Subject to this Court's approval, it is hereby stipulated and agreed, by and between the attorneys for the respective parties hereto, that for the purpose of the petition for writs of certiorari the printed record may consist of the following:

1. Appendix to brief for appellant in the United States Circuit Court of Appeals for the Fourth Circuit.

2. The proceedings had before the United States Circuit Court of Appeals for the Fourth Circuit.

It is further stipulated and agreed that petitioner will cause the Clerk of the United States Circuit Court of Appeals for the Fourth Circuit to file with the Clerk of the Supreme Court a complete certified transcript of the record on appeal in the Circuit Court of Appeals for the Fourth Circuit; and that, in the event the petition for writs of certiorari is granted, the printed record shall consist of the proceedings in the Circuit Court of Appeals for the Fourth Circuit and such portions of the complete transcript of record on appeal in that court as the parties may designate.

It is further stipulated and agreed that either of the parties hereto may refer in his brief to the record filed in the Supreme Court of the United States.

Dated this 18 day of March 1946.

J. Howard McGrath,
J. HOWARD MCGRATH,
Solicitor General,
Attorney for Petitioner.

ERNEST K. JAMES,
Attorney for Respondent.

Proceedings in the United States Circuit Court of Appeals for the Fourth Circuit

No. 5420

UNITED STATES OF AMERICA, APPELLANT

v.

F. H. WITHROW, APPELLEE

Appeal from the District Court of the United States for the Southern District of West Virginia, at Charleston

August 9, 1945, the transcript of record is filed and the cause docketed.

Same day, order extending time to file record and docket appeals is filed.

Same day, the original exhibits are certified up.

August 11, 1945, the appearance of Ernest K. James is entered for the appellee.

August 21, 1945, the appearance of Leslie E. Given, U. S. Attorney; J. Edward Williams, Acting [redacted] Lands Division, Department of Justice, and Roger P. Mar[redacted] Attorney, Department of Justice, is entered for the appellant.

August 28, 1945, stipulation to continue cases to the November term, 1945, and as to briefs, is filed.

Order continuing cases

Filed August 30, 1945

NOTE: This order appears at page 251 of the transcript of record and is, therefore, omitted here.

October 6, 1945, appendix to brief of appellant is filed.

October 19, 1945, brief on behalf of appellant is filed.

October 31, 1945, brief on behalf of appellee is filed.

Argument of cause

November 6, 1945 (November term, 1945), cause came on to be heard, together with No. 5419, before Soper, Circuit Judge, and Coleman and Barksdale, District Judges, and was argued by counsel and submitted.

Opinion

Filed January 4, 1946

NOTE: The opinion appears at page 253 of the transcript of record and is, therefore, omitted here.

Judgment

Filed and Entered January 4, 1946

United States Circuit Court of Appeals, Fourth Circuit

No. 5420

UNITED STATES OF AMERICA, APPELLANT

vs.

F. H. WITHROW, APPELLEE

Appeal From the District Court of the United States for the Southern District of West Virginia

This cause came on to be heard on the transcript of the record from the District Court of the United States for the Southern District of West Virginia, and was argued by counsel.

On consideration whereof, it is now here ordered and adjudged by this Court that the judgment of the said District Court appealed from, in this cause, be, and the same is hereby, affirmed.

MORRIS A. SOPER,
U. S. Circuit Judge.
WILLIAM C. COLEMAN,
U. S. District Judge.
A. D. BARKSDALE,
U. S. District Judge.

On another day, to wit, February 4, 1945, the mandate of this Court, in this cause, is issued and transmitted to the District Court of the United States for the Southern District of West Virginia, at Charleston, in due form.

Same day, the original exhibits are returned to the Clerk of the District Court at Charleston, West Virginia.

Stipulation

NOTE: This stipulation appears at page 269 of the transcript of record and is, therefore, omitted here.

Clerk's certificate.

UNITED STATES OF AMERICA,
Fourth Circuit, ss:

I, Claude M. Dean, Clerk of the United States Circuit Court of Appeals for the Fourth Circuit, do certify that the foregoing is a true copy of the appendix to brief of the United States, appellant, and the proceedings in the said Circuit Court of Appeals in the therein entitled causes, as the same remain upon the records and files of the said Circuit Court of Appeals, and constitute and is a true transcript of the record and proceedings in the said Circuit Court of Appeals in said causes, made up in accordance with the stipulation of counsel for the respective parties, for use in the Supreme Court of the United States on applications for writs of certiorari.

In testimony whereof, I hereto set my hand and affix the seal of the said United States Circuit Court of Appeals for the Fourth Circuit, at Richmond, Virginia, this 20th day of March A. D. 1946.

[SEAL] (S.) CLAUDE M. DEAN, *Clerk,*
U. S. Circuit Court of Appeals, Fourth Circuit.

U. S. GOVERNMENT PRINTING OFFICE: 1946

266 Supreme Court of the United States

No. 77, October Term, 1946

Order allowing certiorari

Filed May 13, 1946

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Fourth Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

Mr. Justice JACKSON took no part in the consideration or decision of this application.

267 Supreme Court of the United States

No. 78, October Term, 1946

Order allowing certiorari

Filed May 13, 1946

The petition herein for a writ of certiorari to the United States Circuit Court of Appeals for the Fourth Circuit is granted.

And it is further ordered that the duly certified copy of the transcript of the proceedings below which accompanied the petition shall be treated as though filed in response to such writ.

Mr. Justice JACKSON took no part in the consideration or decision of this application.

268 Supreme Court of the United States

Stipulation as to record

Filed June 18, 1946

Subject to this Court's approval, it is hereby stipulated and agreed, by and between the attorneys for the respective parties hereto, that for the purpose of the hearing on Writ of Certiorari, the printed record shall consist of the printed record on Petition for Writ of Certiorari.

It is further stipulated and agreed that either of the parties hereto may refer in their briefs and argument to the original record filed in the Supreme Court of the United States, which has not been printed.

J. Howard McGrath
J. HOWARD MCGRATH,
Solicitor General.

Dated this 11th day of June, 1946.

J. H. MCCLINIC,
ERNEST K. JAMES,
WILSON ANDERSON,
Counsel for Respondent.

Dated this 15 day of June 1946.

U. S. GOVERNMENT PRINTING OFFICE: 1946